

=> d his

(FILE 'HOME' ENTERED AT 14:55:35 ON 18 MAR 2005)

FILE 'HCAPLUS' ENTERED AT 14:56:49 ON 18 MAR 2005

E FR1999-597/AP, PRN  
L1 1 FR1999-597/AP, PRN  
E WO2000-FR53/AP, PRN  
L2 1 WO2000-FR53/AP, PRN  
L3 1 L1-2

FILE 'REGISTRY' ENTERED AT 14:57:58 ON 18 MAR 2005

FILE 'HCAPLUS' ENTERED AT 14:57:59 ON 18 MAR 2005  
L4 TRA L3 1- RN : 12 TERMS

FILE 'REGISTRY' ENTERED AT 14:57:59 ON 18 MAR 2005  
L5 12 SEA L4

FILE 'WPIX' ENTERED AT 14:58:03 ON 18 MAR 2005

E FR1999-597/AP, PRN  
L6 1 FR1999-597/AP, PRN  
E WO2000-FR53/AP, PRN  
L7 1 WO2000-FR53/AP, PRN  
L8 1 L6-7

FILE 'REGISTRY' ENTERED AT 15:16:47 ON 18 MAR 2005

L9 STR  
L10 STR L9  
L11 STR L10  
L12 0 L11 CSS  
L13 SCR 2039 OR 2041 OR 2050 OR 2049 OR 2048 OR 2053 OR 2052 OR 204  
L14 0 L11 NOT L13 CSS  
L15 STR L10  
L16 STR L10  
L17 28 L16 CSS  
L18 23 L16 NOT L13 CSS  
L19 STR L16  
L20 22 L19 NOT L13 CSS  
L21 2713 L19 NOT L13 CSS FULL  
L22 13 L21 AND SQL>=6  
SAV TEM L22 AUD178F0/A  
L23 STR L19  
L24 9 L23  
L25 0 L23 CSS  
L26 34 L23 CSS FULL  
SAV TEM AUD178F1/A L26  
L27 STR L16  
L28 50 L27 CSS  
L29 23623 L27 CSS FULL  
L30 176 L29 AND SQL>=6  
SAV TEM L30 AUD178F2/A  
L31 0 L26 AND SQL>=6

FILE 'HCAPLUS' ENTERED AT 16:18:28 ON 18 MAR 2005

L32 98 L22 OR L30  
L33 QUE PY<=1999 OR AY<=1999 OR PRY<=1999 OR PD<19990115 OR AD<1999  
L34 58 L32 AND L33  
E BRIAND J/AU  
L35 367 E3, E5, E11-12  
E SEMETEV V/AU

L36 26 E4  
E LIMAL D/AU  
L37 25 E3-4  
L38 174 (BIO AND MERIEUX)/CS, PA  
L39 2 L32 AND L35-38  
L40 96 L32 NOT L39  
L41 56 L34 NOT L39  
L42 17 L41 AND P/DT

=> b reg

FILE 'REGISTRY' ENTERED AT 16:22:21 ON 18 MAR 2005

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STRUCTURE FILE UPDATES: 17 MAR 2005 HIGHEST RN 845858-62-0

DICTIONARY FILE UPDATES: 17 MAR 2005 HIGHEST RN 845858-62-0

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

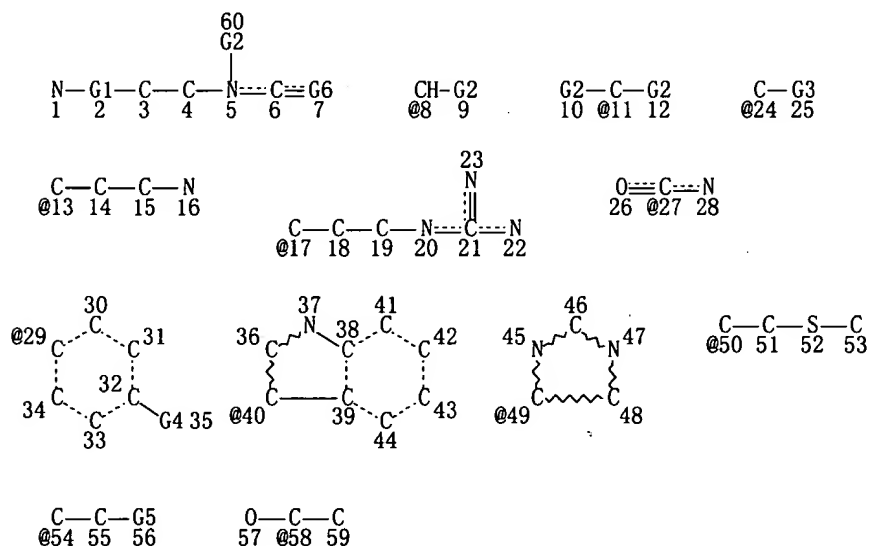
Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=> d que sta 122

L13 SCR 2039 OR 2041 OR 2050 OR 2049 OR 2048 OR 2053 OR 2052 O

R 2043 OR 2054

L19 STR



VAR G1=CH2/8/11

VAR G2=ME/I-PR/S-BU/I-BU/13/17/24/50/54/58

VAR G3=S/CO2H/27/OH/29/40/49

VAR G4=H/OH

VAR G5=CO2H/27

VAR G6=O/S

NODE ATTRIBUTES:

NSPEC IS RC AT 1

CONNECT IS M1 RC AT 1

CONNECT IS M1 RC AT 6

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC 29 36 45

NUMBER OF NODES IS 60

STEREO ATTRIBUTES: NONE

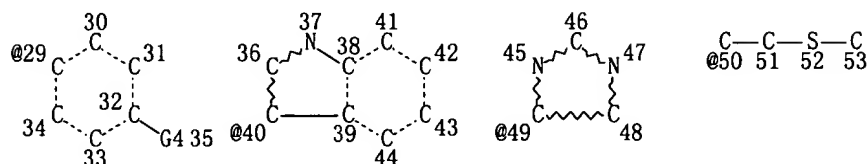
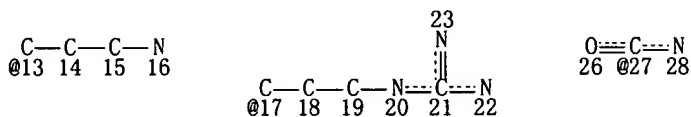
L21 2713 SEA FILE=REGISTRY CSS FUL L19 NOT L13

L22 13 SEA FILE=REGISTRY ABB=ON PLU=ON L21 AND SQL>=6

=> d que sta l30

L27 STR

G2-N-C-C-G1-N-C-G6 CH-G2 G2-C-G2 C-G3  
60 1 2 3 4 5 6 7 @8 9 10 @11 12 @24 25



VAR G1=CH2/8/11

VAR G2=ME/I-PR/S-BU/I-BU/13/17/24/50/54/58

VAR G3=S/CO2H/27/OH/29/40/49

VAR G4=H/OH

VAR G5=CO2H/27

VAR G6=O/S

NODE ATTRIBUTES:

NSPEC IS C AT 1

CONNECT IS M1 RC AT 1

CONNECT IS M1 RC AT 6

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC 29 36 45

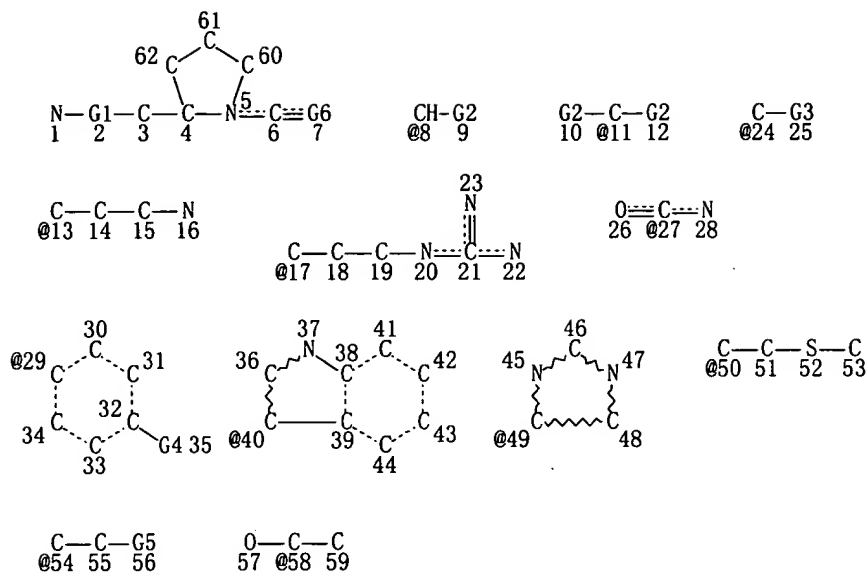
NUMBER OF NODES IS 60

STEREO ATTRIBUTES: NONE

L29 23623 SEA FILE=REGISTRY CSS FUL L27

L30 176 SEA FILE=REGISTRY ABB=ON PLU=ON L29 AND SQL>=6

=> d que sta l31  
L23 STR



VAR G1=CH2/8/11  
VAR G2=ME/I-PR/S-BU/I-BU/13/17/24/50/54/58  
VAR G3=S/CO2H/27/OH/29/40/49  
VAR G4=H/OH  
VAR G5=CO2H/27  
VAR G6=O/S  
NODE ATTRIBUTES:  
NSPEC IS RC AT 1  
CONNECT IS M1 RC AT 1  
CONNECT IS M1 RC AT 6  
DEFAULT MLEVEL IS ATOM  
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
RSPEC 29 36 45 5  
NUMBER OF NODES IS 62

STEREO ATTRIBUTES: NONE  
L26 34 SEA FILE=REGISTRY CSS FUL L23  
L31 0 SEA FILE=REGISTRY ABB=ON PLU=ON L26 AND SQL>=6

=> b hcap  
FILE 'HCAPLUS' ENTERED AT 16:22:42 ON 18 MAR 2005  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
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FILE COVERS 1907 - 18 Mar 2005 VOL 142 ISS 13  
FILE LAST UPDATED: 17 Mar 2005 (20050317/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d all fhitr 139 tot

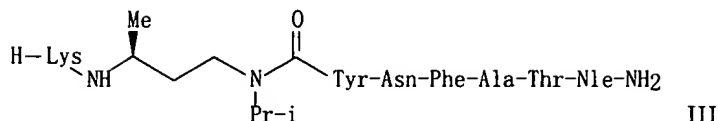
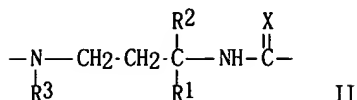
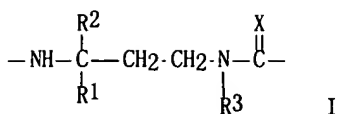
L39 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2005 ACS on STN  
AN 2000:493567 HCAPLUS  
DN 133:105351  
ED Entered STN: 21 Jul 2000  
TI Preparation of pseudopeptides for detecting antigens or antibodies  
IN Briand, Jean-Paul; Semetey, Vincent; Limal, David  
PA Bio Merieux, Fr.  
SO PCT Int. Appl., 41 pp.  
CODEN: PIXXD2  
DT Patent  
LA French  
IC ICM C07K007-02  
CC 34-3 (Amino Acids, Peptides, and Proteins)  
Section cross-reference(s): 6, 63

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000042065	A1	20000720	WO 2000-FR53	20000112
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
FR 2788527	A1	20000721	FR 1999-597	19990115
EP 1140986	A1	20011010	EP 2000-900564	20000112
EP 1140986	B1	20021211		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
AT 229540	E	20021215	AT 2000-900564	20000112
PRAI FR 1999-597	A	19990115		
WO 2000-FR53	W	20000112		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2000042065	ICM	C07K007-02
FR 2788527	ECLA	C07K007/02
OS MARPAT 133:105351		
GI		



AB The invention concerns a pseudopeptide of at least 6 amino acids comprising at least a unit selected among the general formulas I and/or II wherein: R<sup>1</sup>-R<sup>3</sup> each independently of one another represent a side-chain of amino acids and can be identical or different; X represents an oxygen or sulfur atom. The invention also concerns its synthesis process, a reagent containing it, a detection kit comprising such a reagent, a method for detecting an antigen or an antibody using said pseudopeptide, and antibody or and anti-idiotypic and finally a therapeutic composition. Thus, pseudopeptide III was prepared for detecting antigens or antibodies (no data).

ST peptide pseudo: prepn detecting antigen antibody; pseudopeptide prepn detecting antigen antibody

IT Antibodies

Antigens

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of pseudopeptides for detecting antigens or antibodies)

IT Peptides, preparation

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(pseudopeptides; preparation of pseudopeptides for detecting antigens or antibodies)

IT 282531-02-6P 282531-04-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of pseudopeptides for detecting antigens or antibodies)

IT 15761-38-3 35661-39-3

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of pseudopeptides for detecting antigens or antibodies)

IT 67919-80-6P 193954-23-3P 210533-61-2P 223922-49-4P 223922-53-0P 223922-56-3P 223922-60-9P 282531-03-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of pseudopeptides for detecting antigens or antibodies)

RE. CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Bradshaw, C; J MED CHEM 1994, V37, P1991 HCAPLUS

(2) Dallaire, C; TETRAHEDRON LETTERS 1998, V39(29), P5129 HCAPLUS

(3) Limal, D; TETRAHEDRON LETTERS 1999, V40(14), P2749 HCAPLUS

(4) Nouvet, A; TETRAHEDRON LETTERS 1998, V39(15), P2099 HCAPLUS

(5) Searle & Co; EP 0126974 A 1984 HCAPLUS

(6) Talley, J; US 5475013 A 1995 HCAPLUS

(7) Univ Tulane; WO 9213883 A 1992 HCAPLUS

IT 282531-02-6P

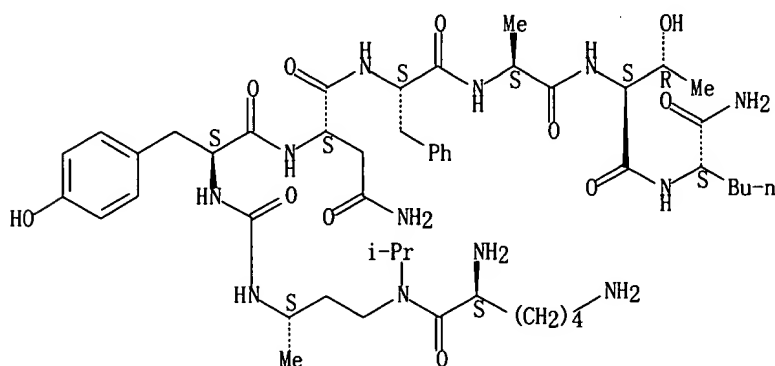
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of pseudopeptides for detecting antigens or antibodies)

RN 282531-02-6 HCAPLUS

CN L-Norleucinamide, N-[[[(1S)-3-[[[(2S)-2,6-diamino-1-oxohexyl](1-methylethyl)amino]-1-methylpropyl]amino]carbonyl]-L-tyrosyl-L-asparaginyl-L-phenylalanyl-L-alanyl-L-threonyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L39 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1999:223728 HCAPLUS

DN 130:325384

ED Entered STN: 12 Apr 1999

TI Solid-phase synthesis of N,N'-unsymmetrically substituted ureas: application to the synthesis of carbaza peptides

AU Limal, David; Semetey, Vincent; Dalbon, Pascal; Jolivet, Michel; Briand, Jean-Paul

CS Laboratoire de Chimie Immunologique, U.P.R. 9021 C.N.R.S., Institut de Biologie Moléculaire et Cellulaire, Strasbourg, 67084, Fr.

SO Tetrahedron Letters (1999), 40(14), 2749-2752

CODEN: TELEAY; ISSN: 0040-4039

PB Elsevier Science Ltd.

DT Journal

LA English

CC 34-3 (Amino Acids, Peptides, and Proteins)

OS CASREACT 130:325384

AB The synthesis of Boc- or Fmoc-mono-protected propylenediamine derivs. is reported starting from N-protected .alpha.-amino acids. The introduction of these building blocks on solid support via the formation of a urea moiety leads to a new pseudopeptide family (C.alpha.-CH2-CH2-N.alpha.(R)-CO-NH-C.alpha.). Two carbonylating reagents, i.e N,N'-carbonyldiimidazole and tri-phosgene, as well as different coupling procedures, have been tested to optimize the Boc and Fmoc solid-phase synthesis of a model peptide incorporating this isosteric replacement.

ST propylenediamine carbaza pseudopeptide prepn amino acid carbonylation

IT Peptides, preparation

RL: SPN (Synthetic preparation); PREP (Preparation)

(pseudopeptides, carbaza; solid phase synthesis of unsym. substituted

o p PD

ureas and application to synthesis of carbaza peptides)

IT Carbonylation  
Solid phase synthesis  
(solid phase synthesis of unsym. substituted ureas and application to synthesis of carbaza peptides)

IT 67919-80-6P 193954-23-3P 210533-61-2P 223922-49-4P 223922-53-0P  
223922-56-3P 223922-60-9P 223922-66-5P 223922-71-2DP,  
solid-supported 223922-76-7DP, solid-supported 223922-90-5P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation and reaction in solid phase synthesis of unsym. substituted ureas as carbaza peptides)

IT 223922-80-3P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of by solid phase synthesis of unsym. substituted ureas as carbaza peptides)

IT 223922-85-8  
RL: MSC (Miscellaneous)  
(preparation of carbaza analog of by solid phase synthesis using unsym. substituted ureas)

IT 102-97-6 15761-38-3 35000-22-7 35661-39-3 223922-33-6D,  
solid-supported  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction in solid phase synthesis of unsym. substituted ureas as carbaza peptides)

RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Abdel-Magid, A; J Org Chem 1996, V61, P3849 HCAPLUS
- (2) Burgess, K; J Am Chem Soc 1997, V119, P1556 HCAPLUS
- (3) Fehrentz, J; Synthesis 1982, P676
- (4) Gante, J; Synthesis 1989, P405 HCAPLUS
- (5) Hutchins, S; Tetrahedron Lett 1995, V36, P2583 HCAPLUS
- (6) Lemaire-Audoire, S; Tetrahedron Lett 1995, V36, P6109
- (7) Limal, D; J Peptide Res 1998, V52, P121 HCAPLUS
- (8) Limal, D; Tetrahedron Lett 1998, V39, P4239 HCAPLUS
- (9) Majer, P; J Org Chem 1994, V59, P1937 HCAPLUS
- (10) Mendre, C; European J Pharmacol 1990, V186, P213 HCAPLUS
- (11) Nahm, S; Tetrahedron Lett 1981, V22, P3815 HCAPLUS
- (12) Quibell, M; J Chem Soc Perkin Trans I 1993, P2843 HCAPLUS
- (13) Spatola, A; Chemistry and Biochemistry of Amino Acids Peptide and Proteins 1983, V7, P267 HCAPLUS
- (14) Zhang, X; J Org Chem 1997, V62, P6420 HCAPLUS

IT 223922-71-2DP, solid-supported  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation and reaction in solid phase synthesis of unsym. substituted ureas as carbaza peptides)

RN 223922-71-2 HCAPLUS

CN L-Threoninamide, N-[[[(3S)-3-[[[(1,1-dimethylethoxy)carbonyl]amino]butyl](1-methylethyl)amino]carbonyl]-L-tyrosyl-L-asparaginyl-L-phenylalanyl-L-alanyl-N-(5-carboxypentyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

  
APP. & Reg.

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(FILE 'HOME' ENTERED AT 14:55:35 ON 18 MAR 2005)

FILE 'HCAPLUS' ENTERED AT 14:56:49 ON 18 MAR 2005

E FR1999-597/AP, PRN  
L1 1 FR1999-597/AP, PRN  
E W02000-FR53/AP, PRN  
L2 1 W02000-FR53/AP, PRN  
L3 1 L1-2

FILE 'REGISTRY' ENTERED AT 14:57:58 ON 18 MAR 2005

FILE 'HCAPLUS' ENTERED AT 14:57:59 ON 18 MAR 2005  
L4 TRA L3 1- RN : 12 TERMS

FILE 'REGISTRY' ENTERED AT 14:57:59 ON 18 MAR 2005  
L5 12 SEA L4

FILE 'WPIX' ENTERED AT 14:58:03 ON 18 MAR 2005

E FR1999-597/AP, PRN  
L6 1 FR1999-597/AP, PRN  
E W02000-FR53/AP, PRN  
L7 1 W02000-FR53/AP, PRN  
L8 1 L6-7

=&gt; b hcap

FILE 'HCAPLUS' ENTERED AT 14:58:52 ON 18 MAR 2005  
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FILE COVERS 1907 - 18 Mar 2005 VOL 142 ISS 13  
FILE LAST UPDATED: 17 Mar 2005 (20050317/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=&gt; d all 13

L3 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2005 ACS on STN  
AN 2000:493567 HCAPLUS  
DN 133:105351  
ED Entered STN: 21 Jul 2000  
TI Preparation of pseudopeptides for detecting antigens or antibodies  
IN Briand, Jean-Paul; Semetev, Vincent; Limal, David  
PA Bio Merieux, Fr.  
SO PCT Int. Appl., 41 pp.  
CODEN: PIXXD2



APP.

3 INV's

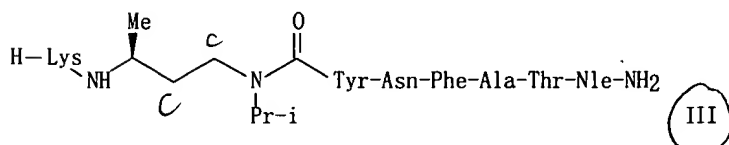
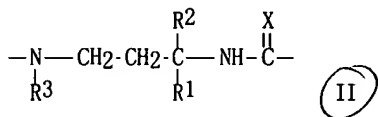
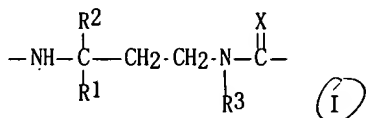
DT Patent  
 LA French  
 IC ICM C07K007-02  
 CC 34-3 (Amino Acids, Peptides, and Proteins)  
 Section cross-reference(s): 6, 63

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000042065	A1	20000720	WO 2000-FR53	20000112 <--
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	RW:	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	FR 2788527	A1	20000721	FR 1999-597	19990115 <--
	EP 1140986	A1	20011010	EP 2000-900564	20000112 <--
	EP 1140986	B1	20021211		
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
	AT 229540	E	20021215	AT 2000-900564	20000112 <--
PRAI	FR 1999-597	A	19990115 <--		
	WO 2000-FR53	W	20000112 <--		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2000042065	ICM	C07K007-02
FR 2788527	ECLA	C07K007/02
OS	MARPAT 133:105351	
GI		



AB The invention concerns a pseudopeptide of at least 6 amino acids comprising at least a unit selected among the general formulas I and/or II wherein: R1-R3 each independently of one another represent a side-chain of amino acids and can be identical or different; X represents an oxygen or

sulfur atom. The invention also concerns its synthesis process, a reagent containing it, a detection kit comprising such a reagent, a method for detecting an antigen or an antibody using said pseudopeptide, and antibody or and anti-idiotypic and finally a therapeutic composition. Thus, pseudopeptide III was prepared for detecting antigens or antibodies (no data).

ST peptide pseudo prepn detecting antigen antibody; pseudopeptide prepn detecting antigen antibody

IT Antibodies

Antigens

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of pseudopeptides for detecting antigens or antibodies)

IT Peptides, preparation

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(pseudopeptides; preparation of pseudopeptides for detecting antigens or antibodies)

IT 282531-02-6P 282531-04-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of pseudopeptides for detecting antigens or antibodies)

IT 15761-38-3 35661-39-3

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of pseudopeptides for detecting antigens or antibodies)

IT 67919-80-6P 193954-23-3P 210533-61-2P 223922-49-4P 223922-53-0P

223922-56-3P 223922-60-9P 282531-03-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of pseudopeptides for detecting antigens or antibodies)

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Bradshaw, C; J MED CHEM 1994, V37, P1991 HCAPLUS
- (2) Dallaire, C; TETRAHEDRON LETTERS 1998, V39(29), P5129 HCAPLUS
- (3) Limal, D; TETRAHEDRON LETTERS 1999, V40(14), P2749 HCAPLUS
- (4) Nouvet, A; TETRAHEDRON LETTERS 1998, V39(15), P2099 HCAPLUS
- (5) Searle & Co; EP 0126974 A 1984 HCAPLUS
- (6) Talley, J; US 5475013 A 1995 HCAPLUS
- (7) Univ Tulane; WO 9213883 A 1992 HCAPLUS

=> b reg

FILE 'REGISTRY' ENTERED AT 14:58:58 ON 18 MAR 2005

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 17 MAR 2005 HIGHEST RN 845858-62-0

DICTIONARY FILE UPDATES: 17 MAR 2005 HIGHEST RN 845858-62-0

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Search done by Noble Jarrell

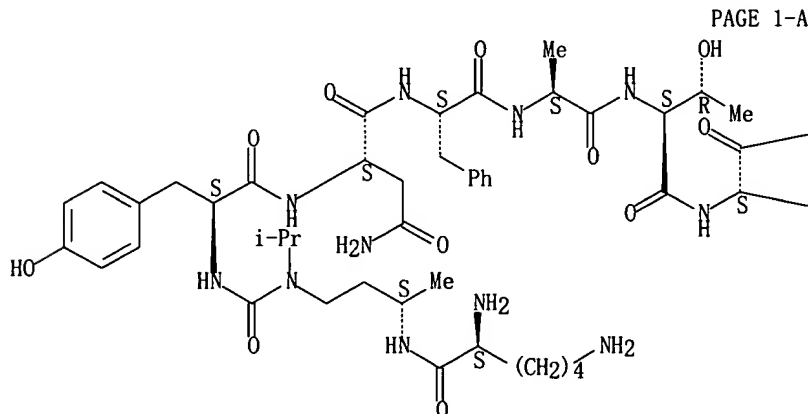
Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

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L5 ANSWER 1 OF 12 REGISTRY COPYRIGHT 2005 ACS on STN  
 RN 282531-04-8 REGISTRY  
 CN L-Norleucinamide, N-[[[(3S)-3-[[[(2S)-2,6-diamino-1-oxohexyl]amino]butyl](1-methylethyl)amino]carbonyl]-L-tyrosyl-L-asparaginyl-L-phenylalanyl-L-alanyl-L-threonyl- (9CI) (CA INDEX NAME)  
 FS PROTEIN SEQUENCE; STEREOSEARCH  
 MF C49 H78 N12 O11  
 SR CA  
 LC STN Files: CA, CAPLUS  
 DT.CA CAplus document type: Patent  
 RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

Absolute stereochemistry.



PAGE 1-B

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—Bu-n

1 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

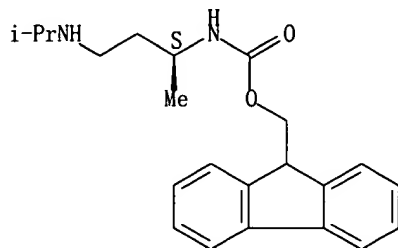
L5 ANSWER 2 OF 12 REGISTRY COPYRIGHT 2005 ACS on STN  
 RN 282531-03-7 REGISTRY

Search done by Noble Jarrell



CN Carbamic acid, [(1S)-1-methyl-3-[(1-methylethyl)amino]propyl]-, 9H-fluoren-9-ylmethyl ester (9CI) (CA INDEX NAME)  
FS STEREOSEARCH  
MF C22 H28 N2 O2  
CI COM  
SR CA  
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DT.CA Caplus document type: Patent  
RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)

Absolute stereochemistry.



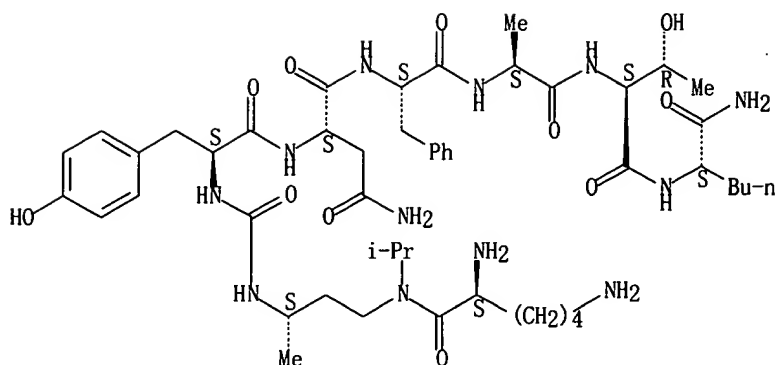
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L5 ANSWER 3 OF 12 REGISTRY COPYRIGHT 2005 ACS on STN  
RN 282531-02-6 REGISTRY  
CN L-Norleucinamide, N-[[[(1S)-3-[[[(2S)-2,6-diamino-1-oxohexyl](1-methylethyl)amino]-1-methylpropyl]amino]carbonyl]-L-tyrosyl-L-asparaginyll-L-phenylalanyl-L-alanyl-L-threonyl- (9CI) (CA INDEX NAME)  
FS PROTEIN SEQUENCE; STEREOSEARCH  
MF C49 H78 N12 O11  
SR CA  
LC STN Files: CA, CAPLUS  
DT.CA Caplus document type: Patent  
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

\*\*RELATED SEQUENCES AVAILABLE WITH SEQLINK\*\*

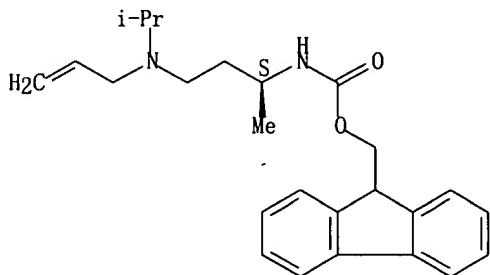
Absolute stereochemistry.



1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L5 ANSWER 4 OF 12 REGISTRY COPYRIGHT 2005 ACS on STN  
RN 223922-60-9 REGISTRY  
CN Carbamic acid, [(1S)-1-methyl-3-[(1-methylethyl)-2-propenylamino]propyl]-, 9H-fluoren-9-ylmethyl ester (9CI) (CA INDEX NAME)  
FS STEREOSEARCH  
MF C25 H32 N2 O2  
SR CA  
LC STN Files: CA, CAPLUS  
DT.CA Caplus document type: Journal; Patent  
RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)  
RL.NP Roles from non-patents: PREP (Preparation); RACT (Reactant or reagent)

Absolute stereochemistry.



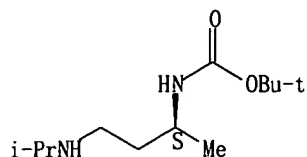
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2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L5 ANSWER 5 OF 12 REGISTRY COPYRIGHT 2005 ACS on STN  
RN 223922-56-3 REGISTRY  
CN Carbamic acid, [(1S)-1-methyl-3-[(1-methylethyl)amino]propyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)  
FS STEREOSEARCH  
MF C12 H26 N2 O2  
SR CA  
LC STN Files: CA, CAPLUS, CASREACT  
DT.CA Caplus document type: Journal; Patent  
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RL.NP Roles from non-patents: PREP (Preparation); RACT (Reactant or reagent)

Absolute stereochemistry.

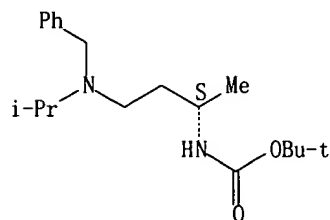


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2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L5 ANSWER 6 OF 12 REGISTRY COPYRIGHT 2005 ACS on STN  
RN 223922-53-0 REGISTRY  
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FS STEREOSEARCH  
MF C19 H32 N2 O2  
SR CA  
LC STN Files: CA, CAPLUS, CASREACT  
DT.CA Caplus document type: Journal; Patent  
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RL.NP Roles from non-patents: PREP (Preparation); RACT (Reactant or reagent)

Absolute stereochemistry.

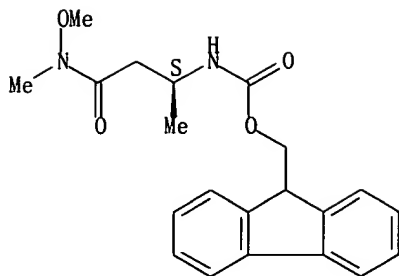


**\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\***

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2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L5 ANSWER 7 OF 12 REGISTRY COPYRIGHT 2005 ACS on STN  
RN 223922-49-4 REGISTRY  
CN Carbamic acid, [(1S)-3-(methoxymethylamino)-1-methyl-3-oxopropyl]-, 9H-fluoren-9-ylmethyl ester (9CI) (CA INDEX NAME)  
FS STEREOSEARCH  
MF C21 H24 N2 O4  
SR CA  
LC STN Files: CA, CAPLUS  
DT.CA Caplus document type: Journal; Patent  
RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)  
RL.NP Roles from non-patents: PREP (Preparation); RACT (Reactant or reagent)

Absolute stereochemistry.

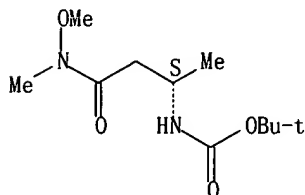


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2 REFERENCES IN FILE CA (1907 TO DATE)  
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L5 ANSWER 8 OF 12 REGISTRY COPYRIGHT 2005 ACS on STN  
RN 210533-61-2 REGISTRY  
CN Carbamic acid, [(1S)-3-(methoxymethylamino)-1-methyl-3-oxopropyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)  
FS STEREOSEARCH  
MF C11 H22 N2 O4  
SR CA  
LC STN Files: CA, CAPLUS, CASREACT  
DT.CA Caplus document type: Journal; Patent  
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RL.NP Roles from non-patents: PREP (Preparation); RACT (Reactant or reagent)

Absolute stereochemistry.



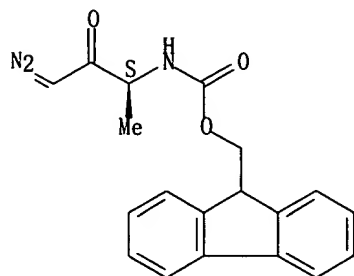
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3 REFERENCES IN FILE CA (1907 TO DATE)  
3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L5 ANSWER 9 OF 12 REGISTRY COPYRIGHT 2005 ACS on STN  
RN 193954-23-3 REGISTRY  
CN Carbamic acid, [(1S)-3-diazo-1-methyl-2-oxopropyl]-, 9H-fluoren-9-ylmethyl ester (9CI) (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN Carbamic acid, (3-diazo-1-methyl-2-oxopropyl)-, 9H-fluoren-9-ylmethyl ester, (S)-  
FS STEREOSEARCH  
MF C19 H17 N3 O3  
SR CA  
LC STN Files: CA, CAPLUS, CASREACT  
DT.CA Caplus document type: Journal; Patent  
RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)

RL.NP Roles from non-patents: PREP (Preparation); RACT (Reactant or reagent)

Absolute stereochemistry.



14 REFERENCES IN FILE CA (1907 TO DATE)

15 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L5 ANSWER 10 OF 12 REGISTRY COPYRIGHT 2005 ACS on STN

RN 67919-80-6 REGISTRY

CN Carbamic acid, [(1S)-3-diazo-1-methyl-2-oxopropyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Carbamic acid, (3-diazo-1-methyl-2-oxopropyl)-, 1,1-dimethylethyl ester, (S)-

FS STEREOSEARCH

MF C9 H15 N3 O3

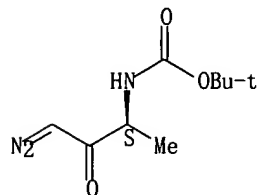
LC STN Files: CA, CAPLUS, CASREACT, USPATFULL

DT.CA Caplus document type: Journal; Patent

RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)

RL.NP Roles from non-patents: PREP (Preparation); RACT (Reactant or reagent)

Absolute stereochemistry. Rotation (-).



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

31 REFERENCES IN FILE CA (1907 TO DATE)

31 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L5 ANSWER 11 OF 12 REGISTRY COPYRIGHT 2005 ACS on STN

RN 35661-39-3 REGISTRY

CN L-Alanine, N-[(9H-fluoren-9-ylmethoxy)carbonyl]- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN (9-Fluorenylmethoxycarbonyl)-L-alanine

CN (S)-N-Fmoc-alanine

CN FMOC-Alanine

CN FMOC-L-alanine

CN N-(9-Fluorenylmethoxycarbonyl)alanine

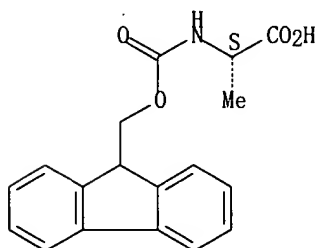
CN N-9-Fluorenylmethoxycarbonyl-L-alanine

CN NPC 14688

Search done by Noble Jarrell

CN NSC 334296  
 FS STEREOSEARCH  
 MF C18 H17 N O4  
 CI COM  
 LC STN Files: BEILSTEIN\*, BIOSIS, CA, CAPLUS, CASREACT, CHEMCATS,  
 CHEMINFORMRX, CHEMLIST, CSCHEM, IFICDB, IFIPAT, IFIUDB, MSDS-OHS,  
 TOXCENTER, USPAT2, USPATFULL  
 (\*File contains numerically searchable property data)  
 Other Sources: EINECS\*\*  
 (\*\*Enter CHEMLIST File for up-to-date regulatory information)  
 DT.CA Caplus document type: Conference; Journal; Patent  
 RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study);  
 CMBI (Combinatorial study); PREP (Preparation); PROC (Process); PRP  
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 (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or  
 reagent); USES (Uses); NORL (No role in record)  
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 reagent)

Absolute stereochemistry.



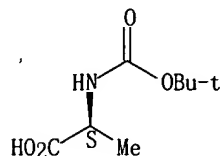
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787 REFERENCES IN FILE CA (1907 TO DATE)  
 108 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 787 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L5 ANSWER 12 OF 12 REGISTRY COPYRIGHT 2005 ACS on STN  
 RN 15761-38-3 REGISTRY  
 CN L-Alanine, N-[(1,1-dimethylethoxy)carbonyl]- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Alanine, N-carboxy-, N-tert-butyl ester, L- (8CI)  
 OTHER NAMES:  
 CN (2S)-2-[(tert-Butoxycarbonyl)amino]propanoic acid  
 CN (S)-2-(N-tert-Butoxycarbonyl)aminopropionic acid  
 CN (S)-2-[(tert-butoxycarbonyl)amino]propionic acid  
 CN (S)-2-[(tert-Butoxycarbonyl)amino]propionic acid  
 CN (tert-Butoxycarbonyl)alanine  
 CN (tert-Butyloxycarbonyl)-L-alanine  
 CN BOC-L-alanine  
 CN N-(tert-Butoxycarbonyl)-(S)-alanine  
 CN N-(tert-Butoxycarbonyl)-L-alanine  
 CN N-(tert-Butoxycarbonyl)alanine

CN N-(tert-Butyloxycarbonyl)-L-alanine  
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 CN N-t-BOC-L-alanine  
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 CN tert-Butoxycarbonyl-L-alanine  
 FS STEREOSEARCH  
 DR 90580-61-3, 186665-28-1, 207305-56-4  
 MF C8 H15 N O4  
 CI COM  
 LC STN Files: BEILSTEIN\*, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CEN,  
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 MSDS-OHS, PS, SPECINFO, SYNTHLINE, TOXCENTER, USPAT2, USPATFULL  
 (\*File contains numerically searchable property data)  
 Other Sources: EINECS\*\*, NDSL\*\*, TSCA\*\*  
 (\*\*Enter CHEMLIST File for up-to-date regulatory information)  
 DT.CA Caplus document type: Conference; Journal; Patent; Report  
 RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study);  
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 RACT (Reactant or reagent); USES (Uses); NORL (No role in record)  
 RLD.P Roles for non-specific derivatives from patents: ANST (Analytical  
 study); PREP (Preparation); RACT (Reactant or reagent)  
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Absolute stereochemistry.



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2600 REFERENCES IN FILE CA (1907 TO DATE)  
 145 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 2602 REFERENCES IN FILE CAPLUS (1907 TO DATE)

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 COPYRIGHT (C) 2005 THE THOMSON CORPORATION

FILE LAST UPDATED: 16 MAR 2005 <20050316/UP>  
 MOST RECENT DERWENT UPDATE: 200518 <200518/DW>  
 DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

>>> FOR A COPY OF THE DERWENT WORLD PATENTS INDEX STN USER GUIDE,  
 PLEASE VISIT:  
[http://www.stn-international.de/training\\_center/patents/stn\\_guide.pdf](http://www.stn-international.de/training_center/patents/stn_guide.pdf) <<<

>>> FOR DETAILS OF THE PATENTS COVERED IN CURRENT UPDATES, SEE  
<http://thomsonderwent.com/coverage/latestupdates/> <<<

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<http://thomsonderwent.com/support/userguides/>

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FOR FURTHER DETAILS: <http://www.thomsonderwent.com/dwpifv> <<<

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<http://thomsonderwent.com/support/dwpioref/reftools/classification/code-revision/> FOR DETAILS. <<<

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L8 ANSWER 1 OF 1 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN

AN 2000-482811 [42] WPIX

DNC C2000-145305

TI New pseudopeptide containing carbonyl replaced by methylene, useful as diagnostic and therapeutic agents, e.g. in vaccines, have improved resistance to protease.

DC B04

IN BRIAND, J P; LIMAL, D; SEMETEV, V; BRIAND, J

PA (INMR) BIO MERIEUX

CYC 91

PI WO 2000042065 A1 ~~20000720~~ (200042)\* FR 40 C07K007-02

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OA PT SD SE SL SZ TZ UG ZW

W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES  
FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS  
LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL  
TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

FR 2788527 A1 20000721 (200042) C07K007-06

AU 2000030531 A 20000801 (200054) C07K007-02

EP 1140986 A1 20011010 (200167) FR C07K007-02

R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT  
RO SE SI

EP 1140986 B1 20021211 (200282) FR C07K007-02

R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DE 60000965 E 20030123 (200315) C07K007-02

ADT WO 2000042065 A1 WO 2000-FR53 20000112; FR 2788527 A1 FR

1999-597 19990115; AU 2000030531 A AU 2000-30531 20000112; EP 1140986

A1 EP 2000-900564 20000112, WO 2000-FR53 20000112; EP 1140986 B1

EP 2000-900564 20000112, WO 2000-FR53 20000112; DE 60000965 E DE

2000-00000965 20000112, EP 2000-900564 20000112, WO 2000-FR53

20000112

FDT AU 2000030531 A Based on WO 2000042065; EP 1140986 A1 Based on WO

2000042065; EP 1140986 B1 Based on WO 2000042065; DE 60000965 E Based on

EP 1140986, Based on WO 2000042065

PRAI FR 1999-597 19990115

IC ICM C07K007-02; C07K007-06

ICS A61K038-08; A61K039-395; A61P031-04; A61P031-12; A61P033-00;

C07K016-42; C07K016-44; G01N033-532; G01N033-564; G01N033-68

AB WO 200042065 A UPAB: 20000905

NOVELTY - Pseudopeptide (A) of at least 6 amino acids contains at least one specified motif in which a peptide carbonyl is replaced by methylene.

DETAILED DESCRIPTION - Pseudopeptide (A) of at least 6 amino acids contains at least one specified motif of formulae (I) and/or (II)  
-NH-CR1R2-CH2CH2-NR2-C- (I) -NR3-CH2CH2-CR1R2-NH-CX- (II).



R1, R2 and R3 = amino acid sidechains; and  
X = O or S.

INDEPENDENT CLAIMS are also included for:

- (a) a method for the synthesis of (A);
- (b) a reagent, for detecting diseases associated with presence of endogenous or exogenous proteins, containing at least one (A);
- (c) a kit for detecting such diseases containing the reagent of (b) immobilized on a solid phase;
- (d) a method for detecting and/or quantifying biological materials by forming an immune complex with (A);
- (e) a method for detecting and/or quantifying an antigen (Ag) (or antibody, Ab) by competitive reaction between predetermined amounts of specific Ab (or Ag), the reagent of (b) and test sample;
- (f) a mono- or poly-clonal antibody (Ab1) produced by immunizing an animal with (A);
- (g) an anti-idiotypic antibody (Ab2) prepared by immunizing an animal with Ab1; and
- (h) a therapeutic composition containing (A), Ab1 or Ab2, optionally as a conjugate, plus an excipient.

ACTIVITY - Antiviral; antiparasitic; anticancer; neuroprotective.

MECHANISM OF ACTION - (A) induce a specific immune response or interact with specific MHC (major histocompatibility complex) molecules associated with a particular autoimmune disease but are unable to activate a pathological T cell response.

USE - (A) are useful for the diagnosis of disease associated with the presence of endogenous or exogenous proteins (e.g. viral or parasitic infections, cancer, autoimmune diseases and neurodegeneration); to detect such proteins in environmental samples, foods, pharmaceutical or cosmetic compositions; therapeutically, especially in immunotherapy and vaccines (for treating or preventing the above diseases) and to generate specific antibodies (Ab1) that react with (A) or with the native peptides and proteins from which (A) are derived.

ADVANTAGE - (A) have better metabolic stability towards proteases than similar peptides or proteins and may also have better biological activities as a result of conformational differences. They are easy to prepare by solid phase or solution methods.

Dwg. 0/2

FS CPI

FA AB; DCN

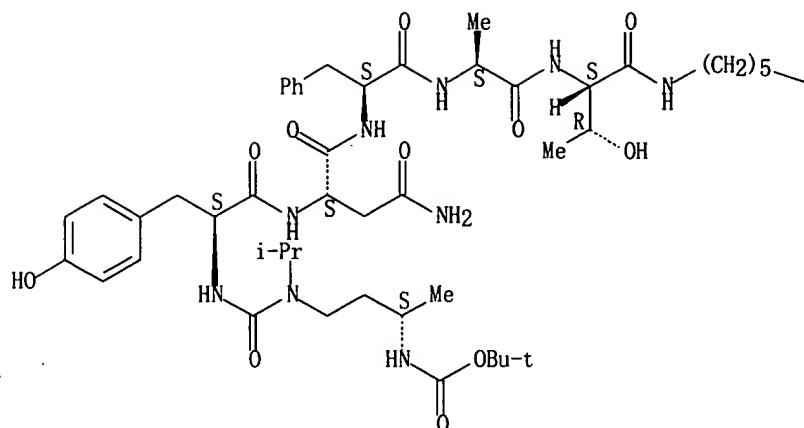
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B14-G02D; B14-H01; B14-J01; B14-S11

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PAGE 1-A



PAGE 1-B

-CO<sub>2</sub>H

=&gt; d all hitstr 142 tot

L42 ANSWER 1 OF 17 HCAPLUS COPYRIGHT 2005 ACS on STN  
 AN 2002:830274 HCAPLUS  
 DN 137:325643  
 ED Entered STN: 31 Oct 2002  
 TI Polyamides binding to minor groove of double-stranded DNA and their use in control of gene expression  
 IN Baird, Eldon E.; Deryan, Peter B.  
 PA California Institute of Technology, USA  
 SO U.S., 53 pp., Cont.-in-part of Appl. No. PCT/US97/12722.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 IC ICM C07D231-02  
 ICS C07D403-02; C07D233-04; C07N019-00; C07N021-02  
 NCL 548312200  
 CC 34-3 (Amino Acids, Peptides, and Proteins)  
 Section cross-reference(s): 3, 27  
 FAN.CNT 11

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6472537	B1	20021029	US 1999-372473	19990811 <--
US 6090947	A	20000718	US 1996-607078	19960226 <--
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C07K007/02; C07K007/04; C08G069/00

&lt;--

AB The invention encompasses improved polyamides for binding to specific nucleotide sequences in the minor groove of double-stranded DNA. The polyamides are in the form of a hairpin comprising two groups of a least three consecutive carboxamide residues, the two groups covalently linked by an aliphatic amino acid residue, preferably .gamma.-aminobutyric acid or 2,4-diaminobutyric acid, the consecutive carboxamide residues of the first group pairing being in an antiparallel manner with the consecutive carboxamide residues of the second group in the minor groove of double-stranded DNA. The 3-hydroxy-N-methylpyrrole/N-methylpyrrole carboxamide pair specifically recognizes the T.cntdot.A base pair, while the N-methylpyrrole/3-hydroxy-N-methylpyrrole pair recognizes A.cntdot.T nucleotide pairs. Similarly, an N-methylimidazole/N-methylpyrrole carboxamide pair specifically recognizes the G.cntdot.C nucleotide pair, and the N-methylpyrrole/N-methylimidazole carboxamide pair recognizes the C.cntdot.G nucleotide pair. Preferably, the binding of the polyamide to the DNA modulates the expression of a gene. Increased specificity of 3-hydroxy-N-methylpyrrole-containing polyamides was demonstrated.

ST polyamide pyrrole hydroxypyrrole DNA binding; gene expression polyamide pyrrole hydroxypyrrole contg

IT Gene

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(expression; polyamides binding to minor groove of double-stranded DNA and their use in control of gene expression)

IT DNA

Gene

Promoter (genetic element)

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(polyamides binding to minor groove of double-stranded DNA and their use in control of gene expression)

IT Polyamides, preparation

RL: BSU (Biological study, unclassified); SPN (Synthetic preparation);  
BIOL (Biological study); PREP (Preparation)  
(polyamides binding to minor groove of double-stranded DNA and their use in control of gene expression)

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RL: BSU (Biological study, unclassified); SPN (Synthetic preparation);

BIOL (Biological study); PREP (Preparation)

(polyamides binding to minor groove of double-stranded DNA and their use in control of gene expression)

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RL: BSU (Biological study, unclassified); SPN (Synthetic preparation);

BIOL (Biological study); PREP (Preparation)

(polyamides binding to minor groove of double-stranded DNA and their use in control of gene expression)

IT 65171-82-6

RL: RCT (Reactant); RACT (Reactant or reagent)

(polyamides binding to minor groove of double-stranded DNA and their use in control of gene expression)

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RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(polyamides binding to minor groove of double-stranded DNA and their use in control of gene expression)

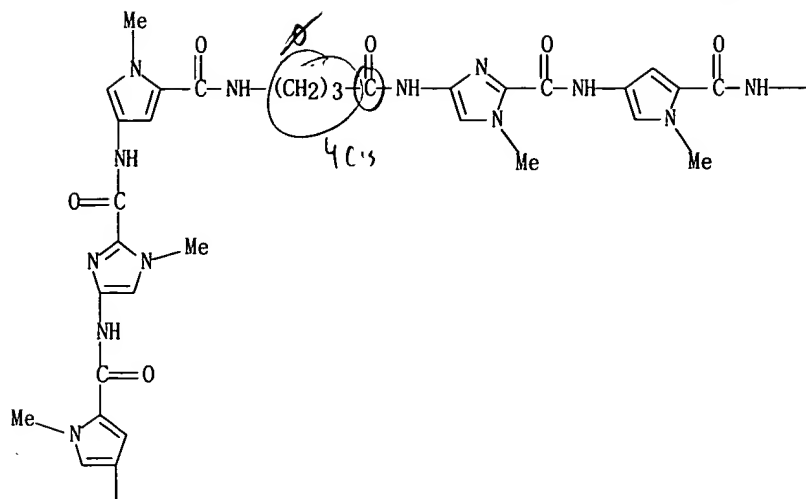
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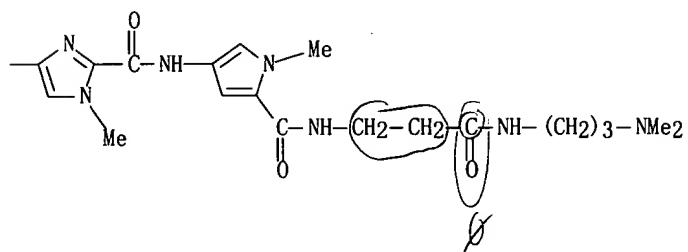
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 BIOL (Biological study); PREP (Preparation)  
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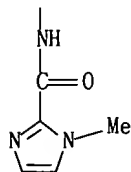
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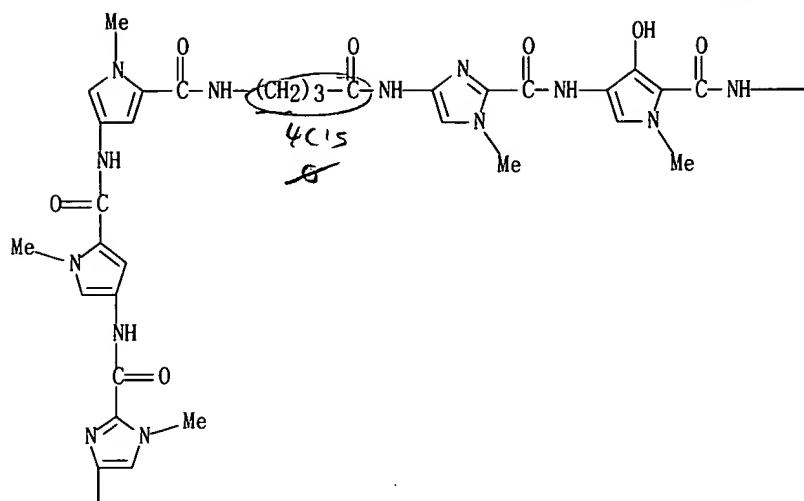


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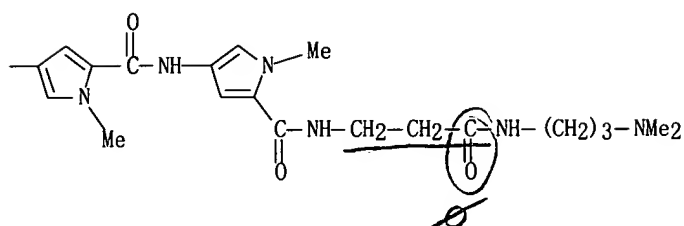


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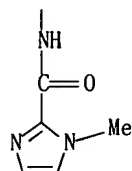
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PAGE 1-B



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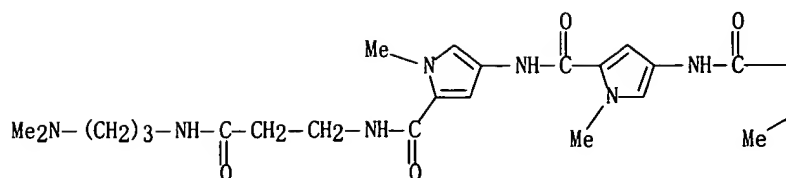


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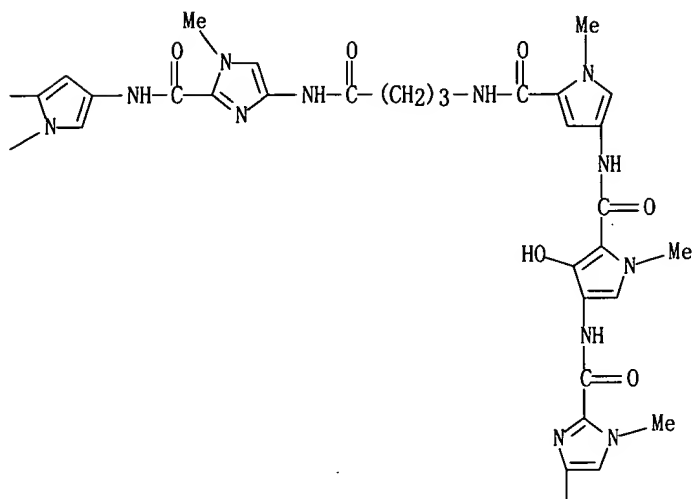
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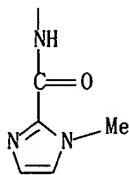
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PAGE 1-B



PAGE 2-B



L42 ANSWER 2 OF 17 HCAPLUS COPYRIGHT 2005 ACS on STN  
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 ED Entered STN: 20 Jun 2001  
 TI preparation of glycopeptides as antibiotics against vancomycin-resistant  
 Enterococcus and methicillin-resistant bacteria  
 IN Asu, Tatsuo; Yoshida, Osamu; Sumino, Yukihiro  
 PA Shionogi and Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 96 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM C07K009-00  
 ICS A61K038-00; A61P031-04

CC 34-3 (Amino Acids, Peptides, and Proteins)

Section cross-reference(s): 1

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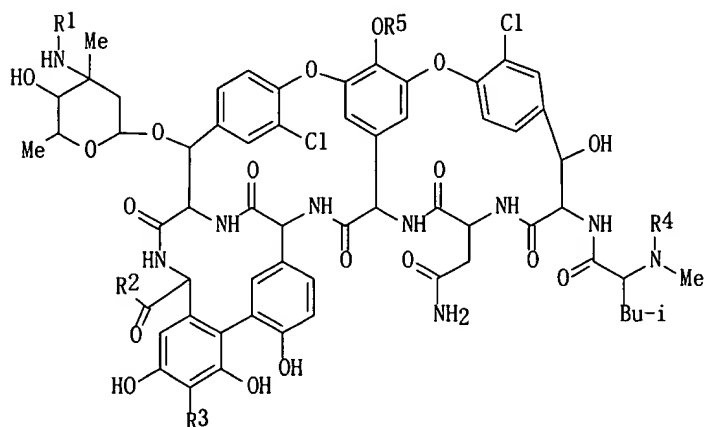
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CLASS

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OS MARPAT 135:61551

GI



I

AB Title compds. I [R1 = H, (un)substituted benzyl, alkyl, alkenyl, alkynyl, arylalkylcarbamoyl, etc.; R2 = OH, (un)substituted (di)alkylamino, cycloalkylamino, methylamino, etc.; R3 = H, (un)substituted aminomethyl, alkynyl, halo, etc.; R4 = H, (un)substituted alkyl, alkyloxycarbonyl, arylamide, etc.; R5 = H, glucosyl, (4-epi-vancosaminylo-glucosyl], pharmaceutically acceptable salts, hydrates, or prodrugs are prepared Compound I [R1 = 4-[2-(4-chlorophenyl)vinyl]benzyl, R2 = OH, R3 = H, R4 = p-methoxybenzyloxycarbonyl, R5 = glucosyl] was reacted in the presence of Na<sub>2</sub>CO<sub>3</sub> in F3CCO<sub>2</sub>H in H<sub>2</sub>O to give 36% I [R1 = 4-[2-(4-chlorophenyl)vinyl]benzyl, R2 = OH, R3 = H, R4 = H, R5 = glucosyl] showing good bactericidal activity against MRSA.

ST glycopeptide prepn antibiotic vancomycin resistant Enterococcus; methicillin resistant bacteria antibiotic glycopeptide prepn

IT Antibiotics

Enterococcus

(preparation of glycopeptides as antibiotics against vancomycin-resistant Enterococcus and methicillin-resistant bacteria)

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RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of glycopeptides as antibiotics against vancomycin-resistant Enterococcus and methicillin-resistant bacteria)

IT 66-84-2, D-Glucosamine hydrochloride 343-94-2, Tryptamine hydrochloride 536-74-3, Phenylacetylene 2016-57-1, 1-Aminodecane 2411-58-7, Undecyl isocyanate 3399-67-5, (2-Aminoethyl)trimethylammonium chloride hydrochloride 26988-71-6, L-Tryptophan methyl ester hydrochloride 41840-29-3 121786-75-2 133274-58-5 222714-25-2 345268-66-8 345268-76-0

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of glycopeptides as antibiotics against vancomycin-resistant Enterococcus and methicillin-resistant bacteria)

IT 345268-61-3P 345268-62-4P 345268-63-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of glycopeptides as antibiotics against vancomycin-resistant Enterococcus and methicillin-resistant bacteria)

IT 345268-37-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

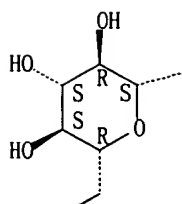
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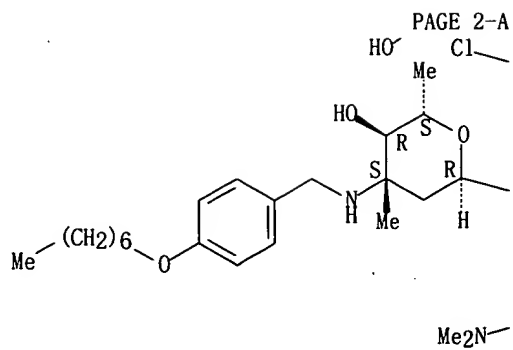
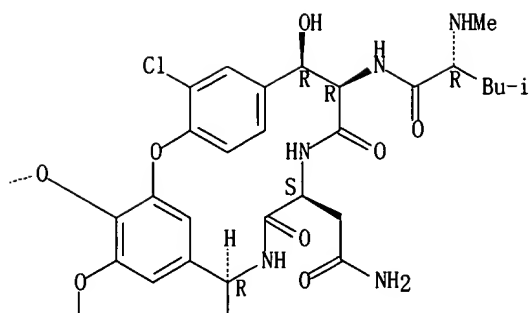
CN Vancomycin, 2'-O-de(3-amino-2,3,6-trideoxy-3-C-methyl-.alpha.-L-lyxo-hexopyranosyl)-26-decarboxy-26-[[[3-(dimethylamino)propyl]amino]carbonyl]-29-[[[2-oxo-2-(2,2,2-trimethylhydrazinium-1-yl)ethyl]amino]methyl]-22-O-[2,3,6-trideoxy-3-[[[4-(heptyloxy)phenyl]methyl]amino]-3-C-methyl-.alpha.-L-arabino-hexopyranosyl]-, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

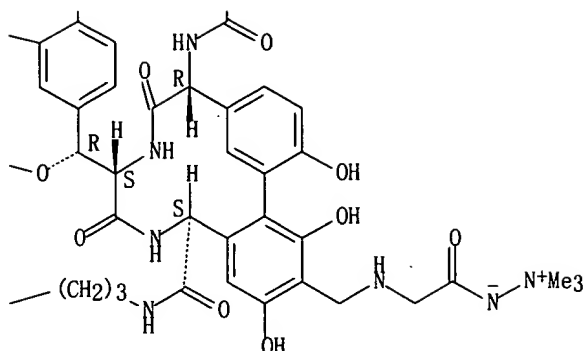
PAGE 1-A



PAGE 1-B



PAGE 2-B



L42 ANSWER 3 OF 17 HCAPLUS COPYRIGHT 2005 ACS on STN  
AN 1999:779155 HCAPLUS  
DN 132:19609  
ED Entered STN: 09 Dec 1999  
TI Inhibition of transcription or cell proliferation with DNA-binding  
polyamides  
IN Dervan, Peter B.; Gottesfeld, Joel M.  
PA The Scripps Research Institute, USA; California Institute of Technology  
SO U.S., 25 pp., Cont.-in-part of U.S. Ser. No. 837,524.  
CODEN: USXXAM  
DT Patent  
LA English  
IC ICM C12Q001-68  
NCL 435006000  
CC 3-1 (Biochemical Genetics)  
Section cross-reference(s): 1

FAN. CNT 11

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PI	US 5998140	A	19991207	US 1997-853525	19970508 <--
	US 6143901	A	20001107	US 1997-837524	19970421 <--
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	WO 9850058	A1	19981112	WO 1997-US12733	19970721 <--
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	AU 747998	B2	20020530		
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	US 1996-24374P	P	19960801	<--	
	US 1996-26713P	P	19960925	<--	

Search done by Noble Jarrell

US 1997-38384P	P	19970214	<--
US 1997-837524	A2	19970421	<--
US 1996-607078	A2	19960226	<--
US 1997-38394P	P	19970214	<--
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US 1997-853525	A	19970508	<--
WO 1997-US12722	W	19970721	<--
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WO 1998-US2444	W	19980211	<--

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PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
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US 6143901	ECLA	A61K047/48R2T <--
WO 9850058	ECLA	C12N015/63 <--
US 6303312	ECLA	A61K047/48R2T; C07D207/34; C07D233/90; C07D403/14R+233+207; C07D403/14R+231+207; C07K007/02; <--

AB Methods and compns. are provided for forming complexes intracellularly between dsDNA and oligomers of heterocycles, aliphatic amino acids, particularly omega-amino acids, and a polar end group. By appropriate choice of target sequences and composition of the oligomers, complexes are obtained with low dissociation consts. The formation of complexes can be used for modifying the phenotype of cells, either prokaryotic or eukaryotic, for research and therapy. Thus, polyamides containing N-methylpyrrole and N-methylimidazole were prepared and their binding to DNA characterized. Association consts. of 3.7 X 10<sup>10</sup> were observed for certain polyamides. Similar polyamides inhibited TFIIIA binding to the 5S RNA gene, thereby selectively inhibiting transcription of this gene.

ST transcription cell proliferation DNA binding polyamide

IT RNA

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(5S, gene for, inhibition of transcription of; inhibition of  
transcription or cell proliferation with DNA-binding polyamides)

IT Polyamides, biological studies

RL: BPR (Biological process); BSU (Biological study, unclassified); PEP  
(Physical, engineering or chemical process); SPN (Synthetic preparation);  
THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC  
(Process); USES (Uses)

(N-methylpyrrole and/or N-methylimidazole-containing; inhibition of  
transcription or cell proliferation with DNA-binding polyamides)

IT Transcription factors

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL  
(Biological study); PROC (Process)

(TFIIIA (transcription factor IIIA), binding to 5S RNA gene of;  
inhibition of transcription or cell proliferation with DNA-binding  
polyamides)

IT Antibacterial agents

Antiviral agents

Cell proliferation

Plant cell

Transcription, genetic

(inhibition of transcription or cell proliferation with DNA-binding  
polyamides)

IT Animal cell

(mammalian; inhibition of transcription or cell proliferation with

DNA-binding polyamides)

IT 191916-06-0  
 RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); BIOL (Biological study); OCCU (Occurrence); PROC (Process)  
 (double-stranded, polyamide target; inhibition of transcription or cell proliferation with DNA-binding polyamides)

IT 180530-17-0P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)  
 (inhibition of transcription or cell proliferation with DNA-binding polyamides)

IT 180530-18-1P  
 RL: PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)  
 (inhibition of transcription or cell proliferation with DNA-binding polyamides)

IT 76-02-8 96-54-8 541-41-3, Ethyl chloroformate 616-47-7 2592-95-2, 1-Hydroxybenzotriazole 24424-99-5 57294-38-9  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (inhibition of transcription or cell proliferation with DNA-binding polyamides)

IT 13138-76-6P 30148-21-1P 77716-11-1P 77716-16-6P 109012-23-9P 120122-47-6P 128293-64-1P 180258-45-1P 180258-46-2P 180258-48-4P 195387-60-1P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (inhibition of transcription or cell proliferation with DNA-binding polyamides)

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 RL: PRP (Properties)  
 (unclaimed nucleotide sequence; inhibition of transcription or cell proliferation with DNA-binding polyamides)

IT 115440-32-9 140708-73-2 222160-28-3  
 RL: PRP (Properties)  
 (unclaimed sequence; inhibition of transcription or cell proliferation with DNA-binding polyamides)

RE.CNT 103 THERE ARE 103 CITED REFERENCES AVAILABLE FOR THIS RECORD

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IT 180530-17-0P

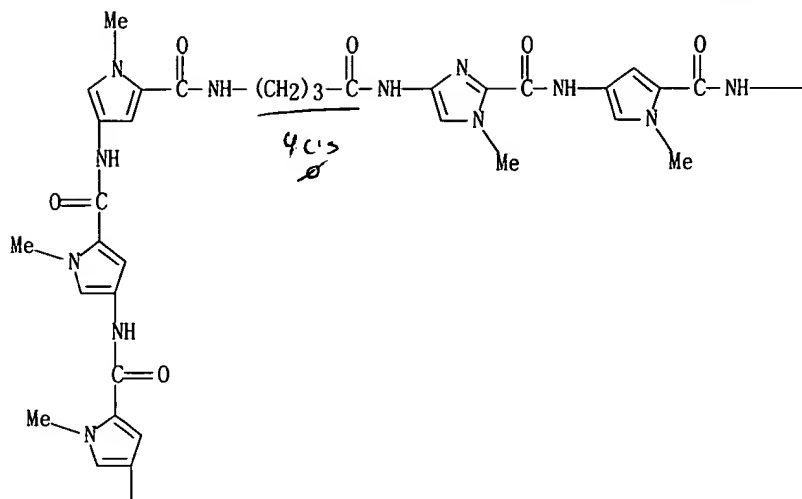
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)

(inhibition of transcription or cell proliferation with DNA-binding polyamides)

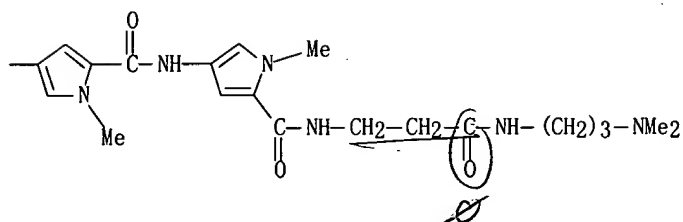
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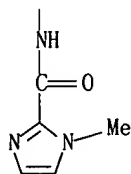
PAGE 1-A



PAGE 1-B



PAGE 2-A



L42 ANSWER 4 OF 17 HCAPLUS COPYRIGHT 2005 ACS on STN  
 AN 1999:755837 HCAPLUS  
 DN 131:322927  
 ED Entered STN: 30 Nov 1999  
 TI Preparation of vancomycin-related antibacterial agents  
 IN Chen, Qi Qi; Griffin, John H.; Jenkins, Thomas E.; Judice, J. Kevin;  
 Linsell, Martin S.; Leadbetter, Michael R.  
 PA Advanced Medicine Inc., USA  
 SO Fr. Demande, 193 pp.  
 CODEN: FRXXBL  
 DT Patent  
 LA French  
 IC ICM C07K009-00  
 ICS A61K038-14  
 CC 34-3 (Amino Acids, Peptides, and Proteins)

Section cross-reference(s): 10, 63

FAN.CNT 2

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	IT 1307018	B1	20011023	IT 1999-T0134	19990222 <--
PRAI	US 1998-75514P	P	19980220	<--	
	US 1998-78903P	P	19980320	<--	
	US 1998-82209P	P	19980417	<--	
	US 1999-119162P	P	19990208	<--	

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
FR 2778184	ICM	C07K009-00
	ICS	A61K038-14
FR 2778184	ECLA	C07K009/00F2 <--
US 6518242	ECLA	C07K009/00F2 <--

AB Novel antibacterial agents that act as multi-binding agents, LpXq [L is a ligand such as an optionally substituted glycopeptide, e.g., vancomycin; X is a linker, e.g., NHR6NHCOR7CONHR8NH (R6, R7, R8 are optionally substituted alkylene); p = 2-10; q = 1-20], are disclosed. The compds. of the invention are capable of binding to a transglycosylase enzyme substrate, thereby modulating their biol. processes/functions. Thus, [C-C]-[pentane-1,5-dioic acid bis(2-aminoethyl)amide]bis(vancomycin) was prepared by condensation of vancomycin hydrochloride with pentanedioic acid bis(2-aminoethyl)amide and used to prepare pharmaceutical formulations. The compds. of the invention showed a broad spectrum of antibacterial activity.

ST glycopeptide linked vancomycin prepn antibacterial; vancomycin linked peptide prepn antibacterial

IT Antibacterial agents  
(preparation of vancomycin-related antibacterial agents)

IT Glycopeptides  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of vancomycin-related antibacterial agents)

IT 239087-61-7P 239087-64-0P 239087-65-1P 239087-81-1P 239087-83-3P  
239087-86-6P 239087-87-7P 239087-88-8DP, N-methyl-D-glucamine  
derivative 239087-88-8P 239087-89-9P 239087-92-4P 239087-93-5P  
239087-94-6P 239087-96-8P 239088-07-4P  
239088-09-6P 239088-11-0P 239088-15-4P  
239088-29-0P 239088-31-4P 239088-33-6P 239088-35-8P  
239088-37-0P 239088-39-2P 239088-41-6P 239088-45-0P  
239088-49-4DP, N-methyl-D-glucamine derivative 239088-49-4P 239088-52-9P  
239088-54-1P 239088-56-3P 239088-58-5P 239088-60-9P 239088-62-1P  
239088-64-3P 239088-67-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of vancomycin-related antibacterial agents)

IT 107-15-3, 1,2-Ethanediamine, reactions 109-55-7, 3-  
(Dimethylamino)propylamine 110-60-1, 1,4-Diaminobutane 112-13-0,  
Decanoyl chloride 112-29-8, 1-Bromodecane 141-43-5, Reactions,  
reactions 626-15-3, .alpha.,.alpha.'-Dibromo-m-xylene 1404-93-9,  
Vancomycin hydrochloride 2873-74-7, Glutaryl dichloride 5680-79-5,  
Glycine methyl ester hydrochloride 5736-88-9, p-Butoxybenzaldehyde  
34490-86-3, Dimethyl suberimide dihydrochloride 57260-73-8  
57530-93-5 98577-77-6 105496-31-9 239087-62-8 239087-66-2

239088-01-8      239088-08-5      239088-12-1

(preparation of vancomycin-related antibacterial agents)

239091-79-3P

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(preparation of vancomycin-related antibacterial agents)
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RL: SPN (Synthetic preparation): PREP (Preparation)

(preparation of vancomycin-related antibacterial agents)

239088-07-4P 239088-09-6P 239088-11-0P

239088-15-4P 239088-33-6P 239088-35-8P

239088-37-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of vancomycin-related antibacterial agents)

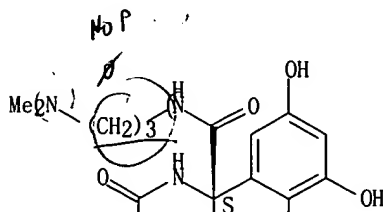
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CRN 239087-85-5

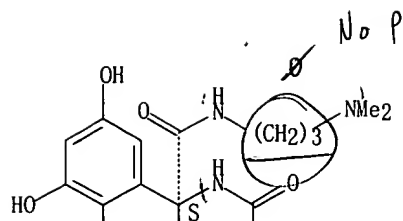
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**Absolute stereochemistry.**

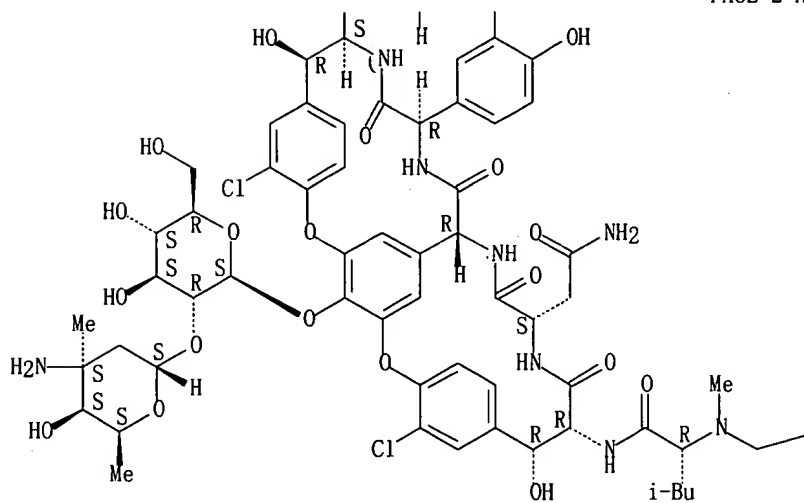
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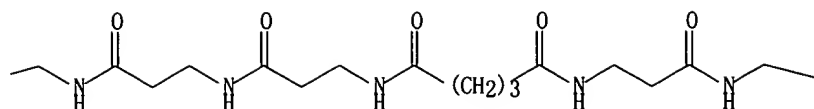
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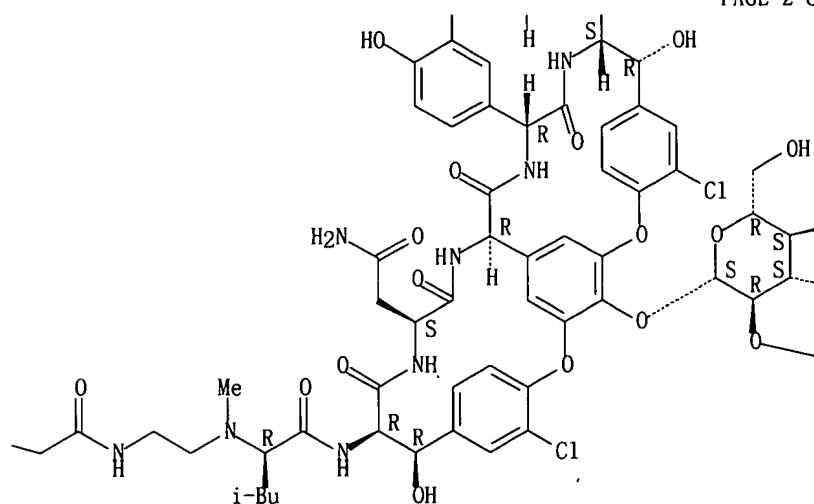
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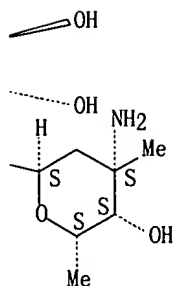
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PAGE 2-C



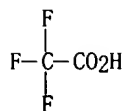
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CM 2

CRN 76-05-1

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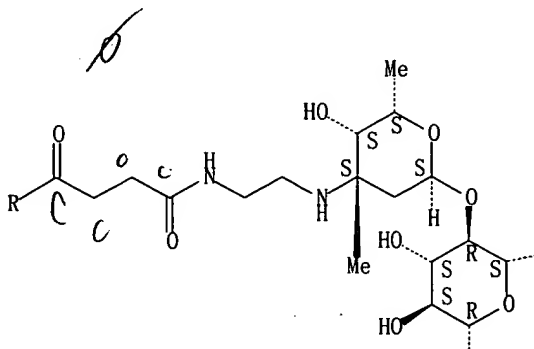


RN 239087-92-4 HCAPLUS

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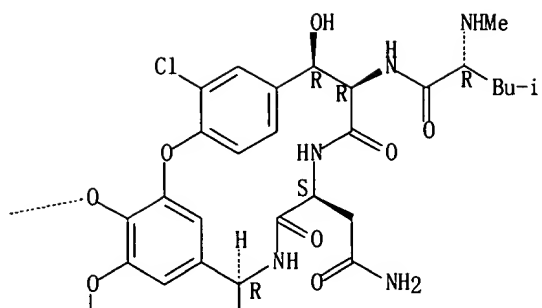
Absolute stereochemistry.

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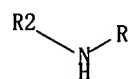
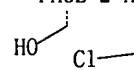
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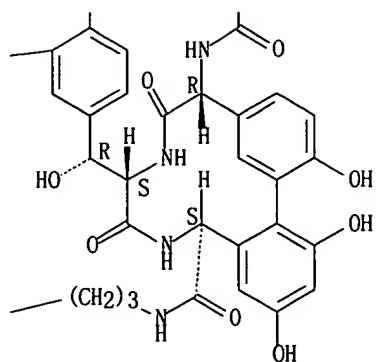
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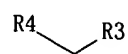
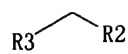




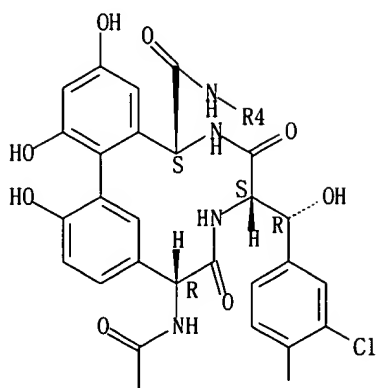
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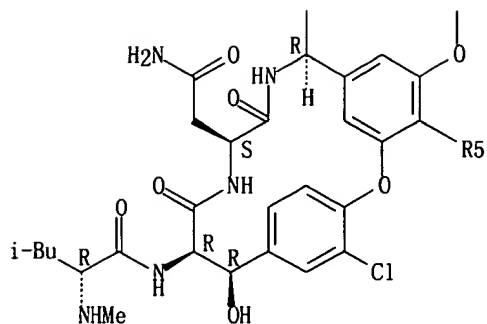
PAGE 3-A



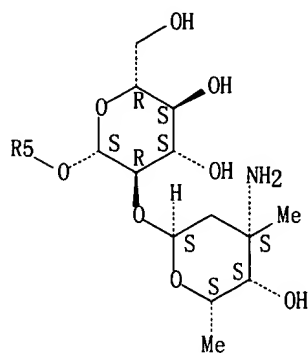
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PAGE 7-A

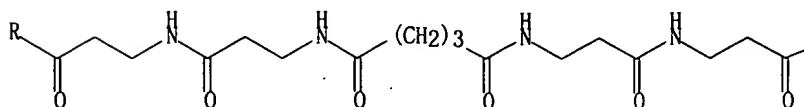


RN 239087-96-8 HCAPLUS

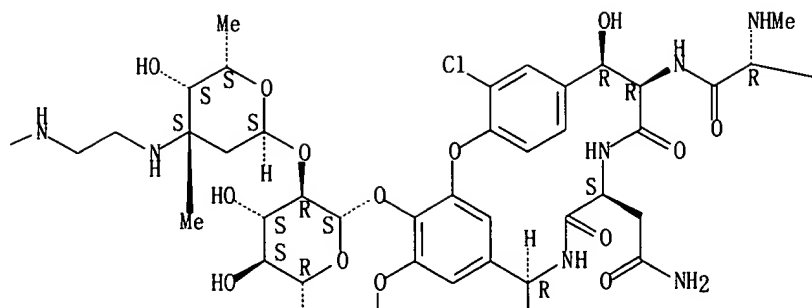
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Absolute stereochemistry.

PAGE 1-A



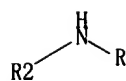
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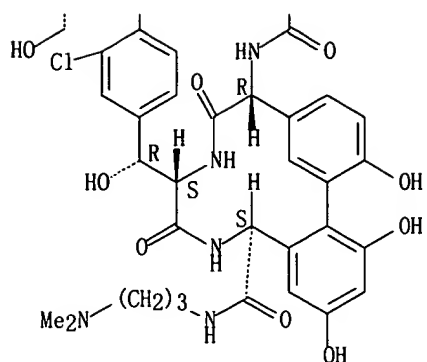
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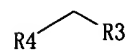
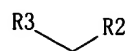
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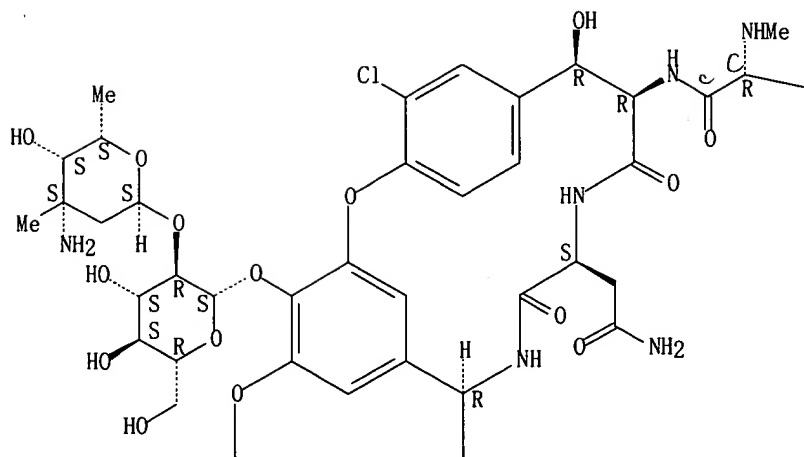
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PAGE 3-A

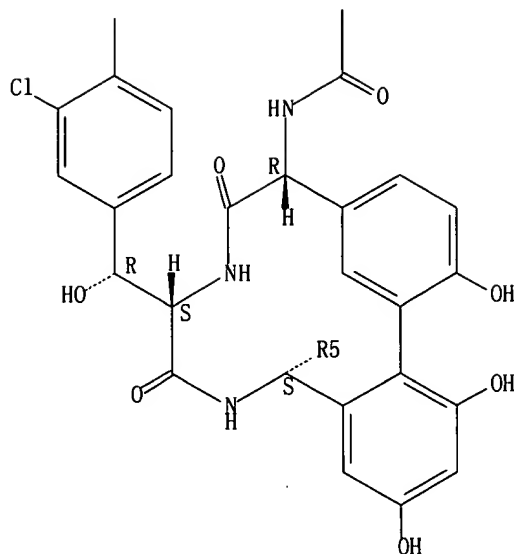


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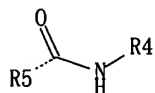
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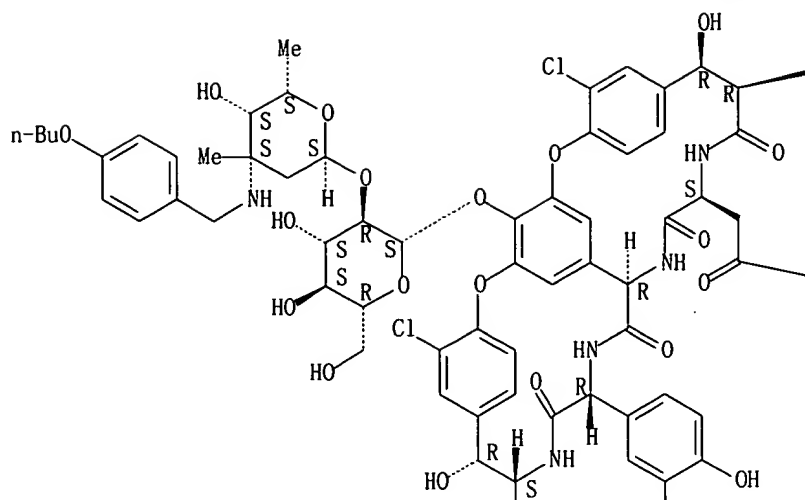
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 (N3''-fwdarw.58)-amide with N3''-[4-butoxyphenyl)methyl]vancomycin,  
 trifluoroacetate (salt) (9CI) (CA INDEX NAME)

CM 1

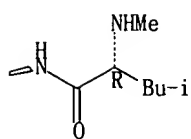
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Absolute stereochemistry.

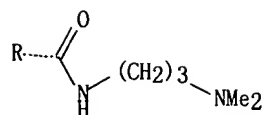
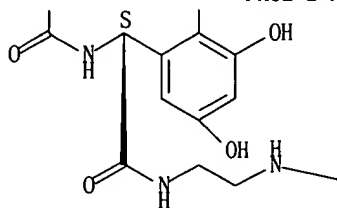
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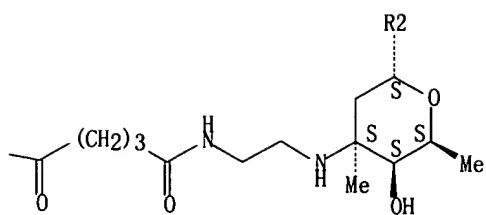
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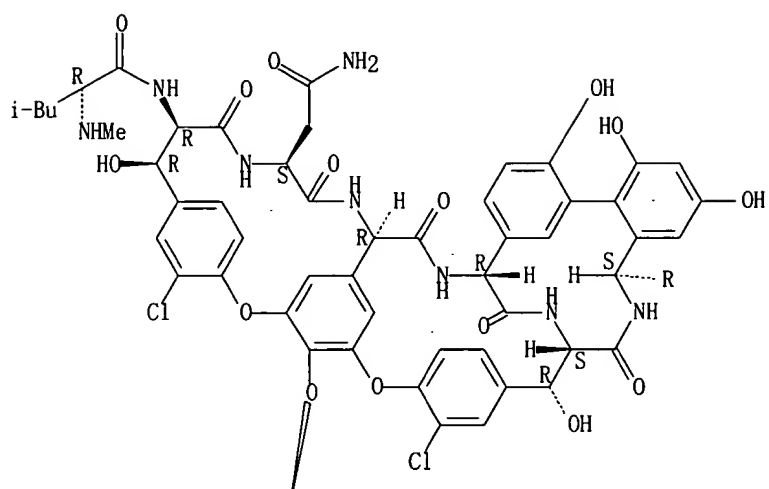
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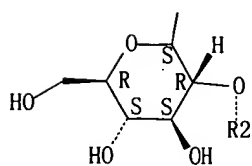
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PAGE 3-A



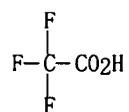
PAGE 4-A



CM 2

CRN 76-05-1

CMF C2 H F3 O2

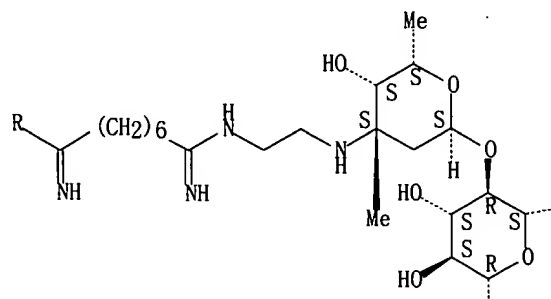


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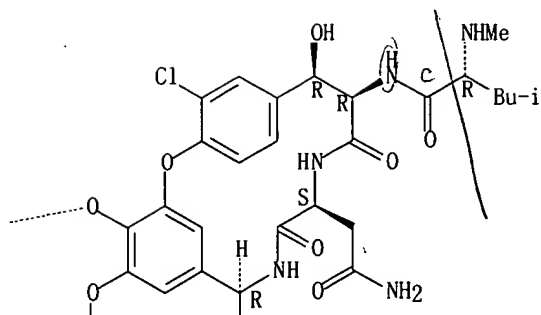
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Absolute stereochemistry.

PAGE 1-A

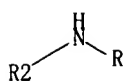
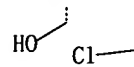


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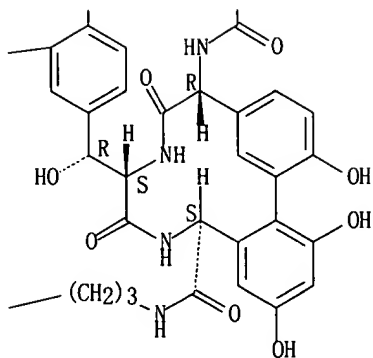




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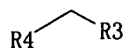
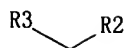


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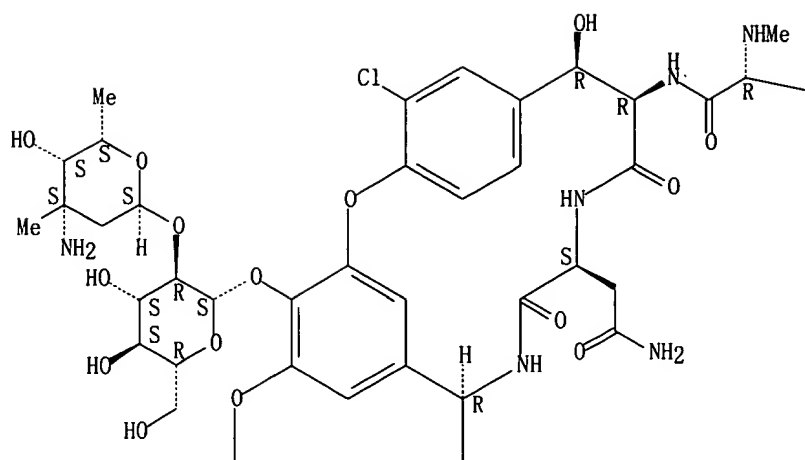


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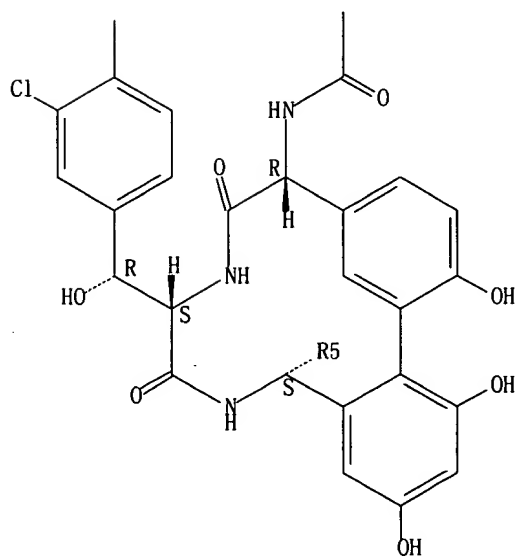
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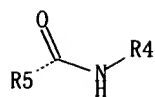
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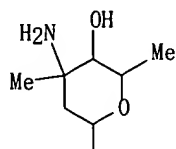
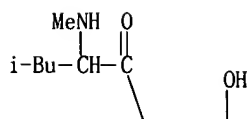


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CRN 239088-10-9  
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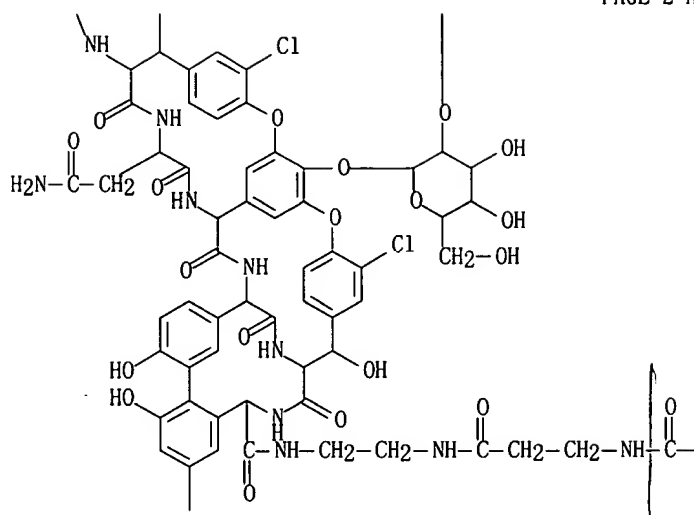


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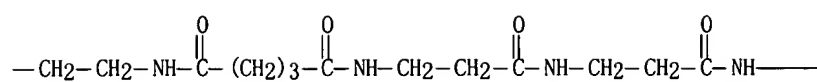


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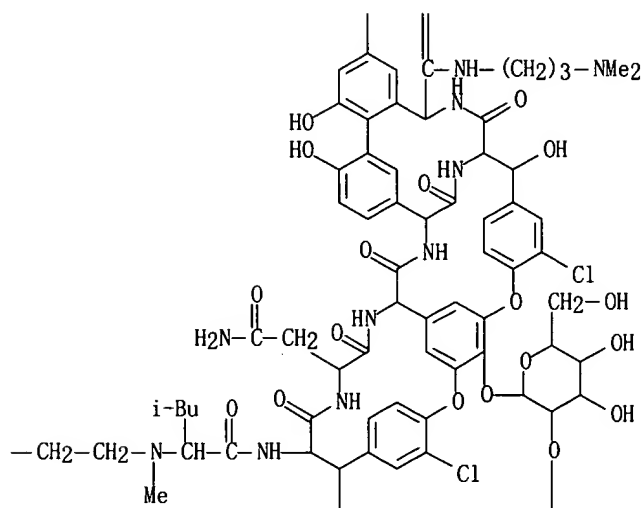


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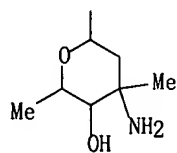
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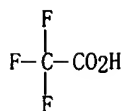
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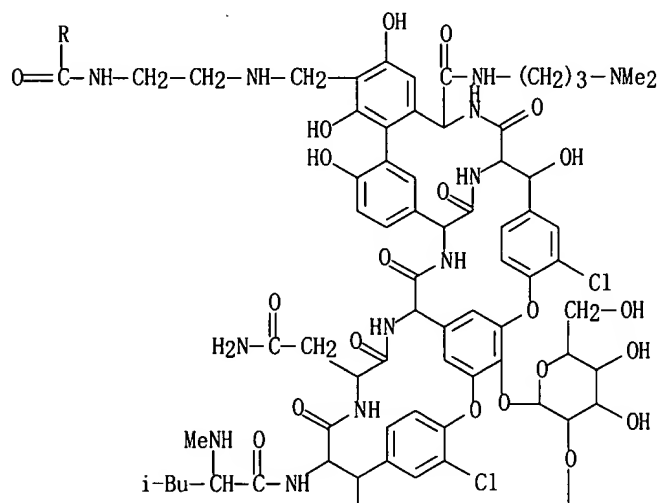
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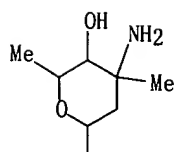
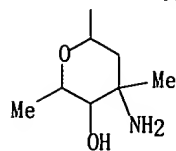
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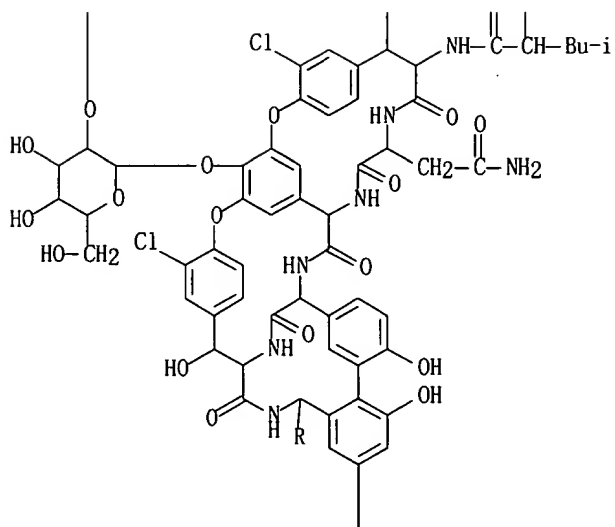
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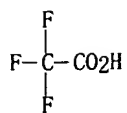
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CM 2

CRN 76-05-1  
CMF C2 H F3 O2

Search done by Noble Jarrell

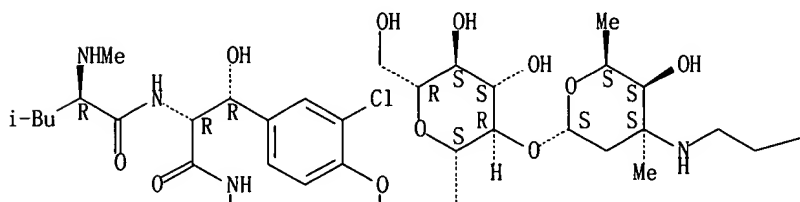


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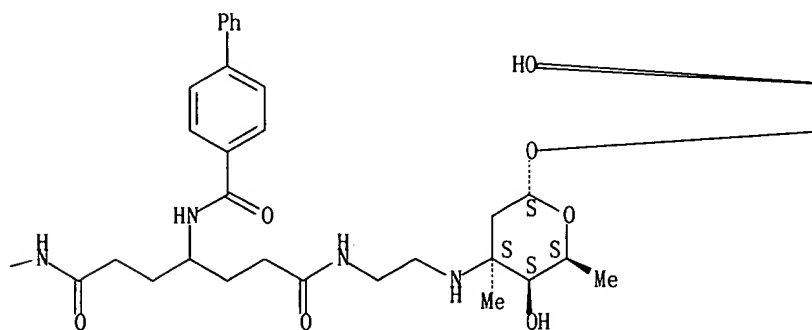
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Absolute stereochemistry.

PAGE 1-A

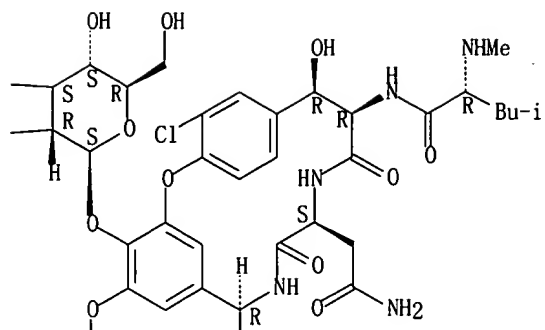


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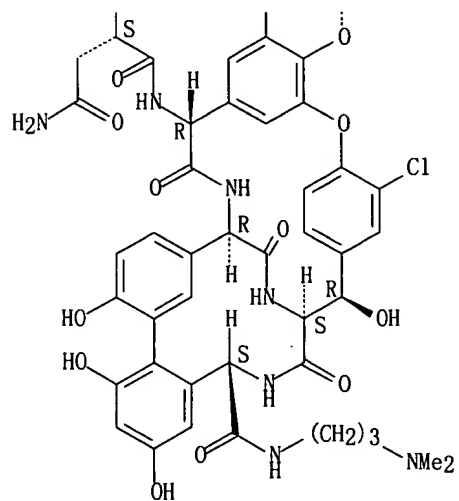




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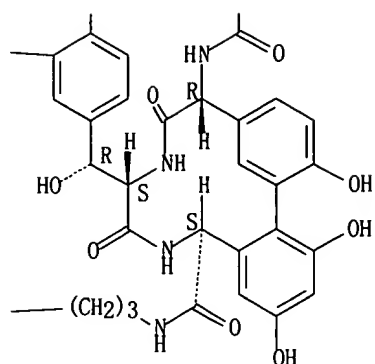


PAGE 2-B

Cl

Me<sub>2</sub>N

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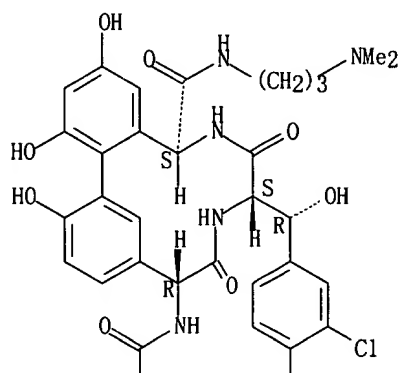


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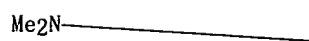
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Absolute stereochemistry.

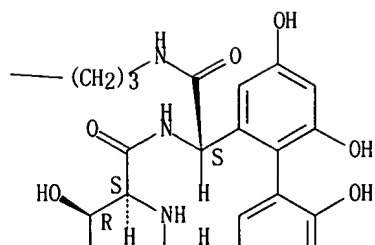
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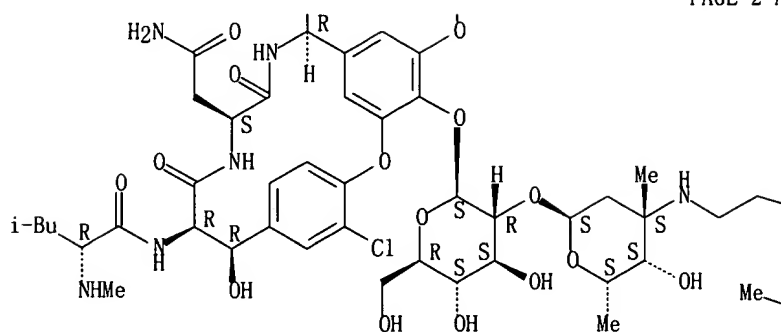
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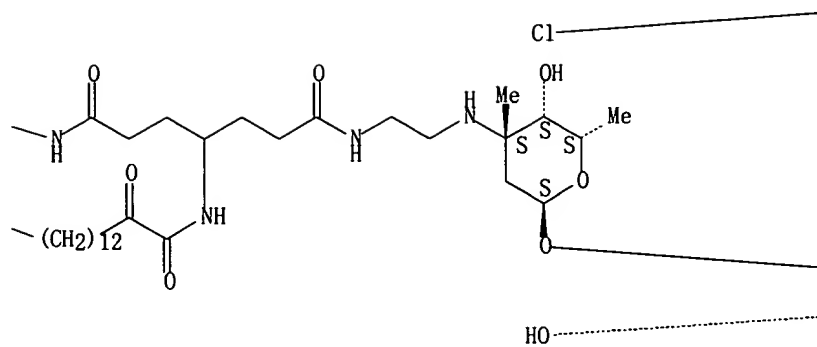
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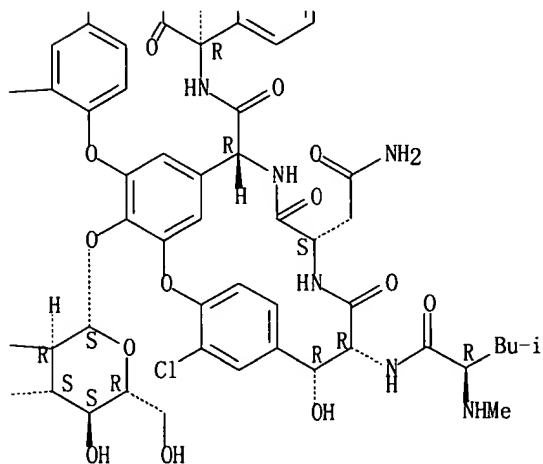
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PAGE 2-B



PAGE 2-C

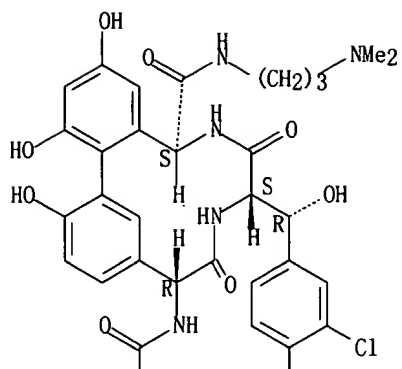


RN 239088-37-0 HCAPLUS

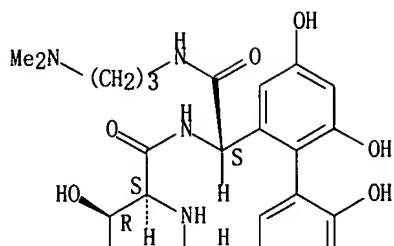
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Absolute stereochemistry.

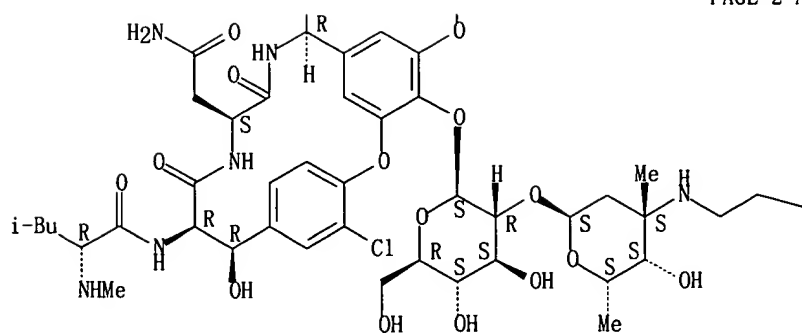
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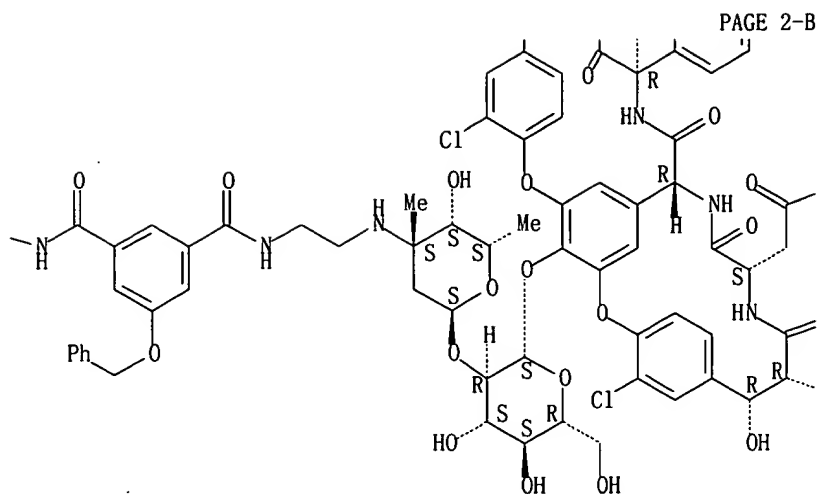


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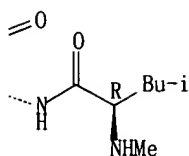


PAGE 2-A





PAGE 2-C

—NH<sub>2</sub>

L42 ANSWER 5 OF 17 HCAPLUS COPYRIGHT 2005 ACS on STN  
 AN 1999:549285 HCAPLUS  
 DN 131:170642  
 ED Entered STN: 31 Aug 1999  
 TI Preparation of vancomycin-related antibacterial agents  
 IN Chon, Qi-Qi; Griffin, John H.; Jenkins, Thomas E.; Judice, J. Kevin;  
 Linsell, Martin S.  
 PA Advanced Medicine, Inc., USA  
 SO PCT Int. Appl., 174 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 IC ICM C07K007-50  
 ICS A61K038-12  
 CC 34-3 (Amino Acids, Peptides, and Proteins)  
 Section cross-reference(s): 10, 63  
 FAN.CNT 2

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RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
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CA 2318394	AA	19990826	CA 1999-2318394	19990222 <--
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ZA 9901412	A	20000822	ZA 1999-1412	19990222 <--
EP 1060189	A1	20001220	EP 1999-934285	19990222 <--
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
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PRAI US 1998-75514P	P	19980220	<--	
US 1998-78903P	P	19980320	<--	
US 1998-82209P	P	19980417	<--	
US 1999-119162P	P	19990208	<--	
WO 1999-US3850	W	19990222	<--	

## CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 9942476	ICM	C07K007-50
	ICS	A61K038-12
WO 9942476	ECLA	C07K009/00F2 <--
US 6518242	ECLA	C07K009/00F2 <--

OS MARPAT 131:170642

AB Novel antibacterial agents that act as multibinding agents, LpXq [L is a ligand such as an optionally substituted glycopeptide, e.g., vancomycin; X is a linker, e.g., NHR6NHCOR7CONHR8NH (R6, R7, R8 are optionally substituted alkylene); p = 2-10; q = 1-20], are disclosed. The compds. of the invention are capable of binding to a transglycosylase enzyme substrate, thereby modulating their biol. processes/functions. Thus, [C-C]-[pentane-1,5-dioic acid bis(2-aminoethyl)amide]bis(vancomycin) was prepared by condensation of vancomycin hydrochloride with pentanedioic acid bis(2-aminoethyl)amide and used to prepare pharmaceutical formulations. The compds. of the invention showed a broad spectrum of antibacterial activity.

ST vancomycin linked derivs prepn antibacterial

IT Antibacterial agents

(preparation of vancomycin-related antibacterial agents)

IT Glycopeptides

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of vancomycin-related antibacterial agents)

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 239087-86-6P 239087-87-7P 239087-88-8DP, N-methyl-D-glucamine  
 derivative 239087-88-8P 239087-89-9P 239087-92-4P 239087-93-5P  
 239087-94-6P 239087-96-8P 239088-07-4P  
 239088-09-6P 239088-11-0P 239088-15-4P  
 239088-29-0P 239088-31-4P 239088-33-6P 239088-35-8P  
 239088-37-0P 239088-39-2P 239088-41-6P 239088-45-0P  
 239088-49-4DP, N-methyl-D-glucamine derivative 239088-49-4P 239088-52-9P  
 239088-54-1P 239088-56-3P 239088-58-5P 239088-60-9P 239088-62-1P  
 239088-64-3P 239088-67-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of vancomycin-related antibacterial agents)

IT 107-15-3, 1,2-Ethanediamine, reactions 109-55-7, 3-(Dimethylamino)propylamine 110-60-1, 1,4-Butanediamine 112-13-0, Decanoyl chloride 112-29-8, 1-Bromodecane 141-43-5, reactions 626-15-3, .alpha.,.alpha.'-Dibromo-m-xylene 1404-93-9, Vancomycin hydrochloride 2873-74-7, Glutaryl dichloride 5680-79-5, Glycine methyl ester hydrochloride 5736-88-9, p-Butoxybenzaldehyde 34490-86-3, Dimethyl suberimide dihydrochloride 57260-73-8 57530-93-5 98577-77-6 105496-31-9 239087-62-8 239087-66-2 239087-68-4 239087-69-5 239087-70-8 239087-90-2 239087-95-7 239088-01-8 239088-08-5 239088-12-1

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of vancomycin-related antibacterial agents)

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RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of vancomycin-related antibacterial agents)

IT 239088-22-3P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of vancomycin-related antibacterial agents)

RE. CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Eli Lilly and Company; WO 9738706 A1 1997 HCAPLUS
- (2) Eli Lilly and Company; WO 9852589 A1 1998 HCAPLUS
- (3) Staroske, T; Tetrahedron Letters 1998, V39, P4917 HCAPLUS
- (4) Sundram, U; J Am Chem Soc 1996, V118, P13107 HCAPLUS

IT 239087-86-6P 239087-92-4P 239087-96-8P 239088-07-4P 239088-09-6P 239088-11-0P 239088-15-4P 239088-33-6P 239088-35-8P 239088-37-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of vancomycin-related antibacterial agents)

RN 239087-86-6 HCAPLUS

CN Vancomycin, 56-(2-aminoethyl)-26-decarboxy-26-[[[3-(dimethylamino)propyl]amino]carbonyl]-, (56.fwdarw.2''), (56'.fwdarw.2'')-diamide with 1,1'-(1,5-dioxo-1,5-pentanediy)bis[.beta.-alanyl-.beta.-alanine], trifluoroacetate (salt) (9CI) (CA INDEX NAME)

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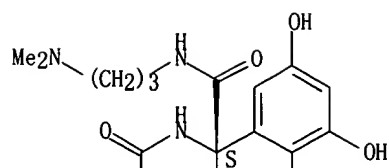
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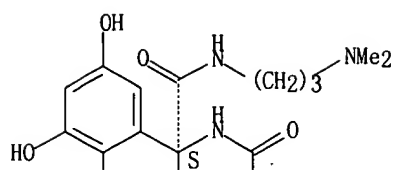
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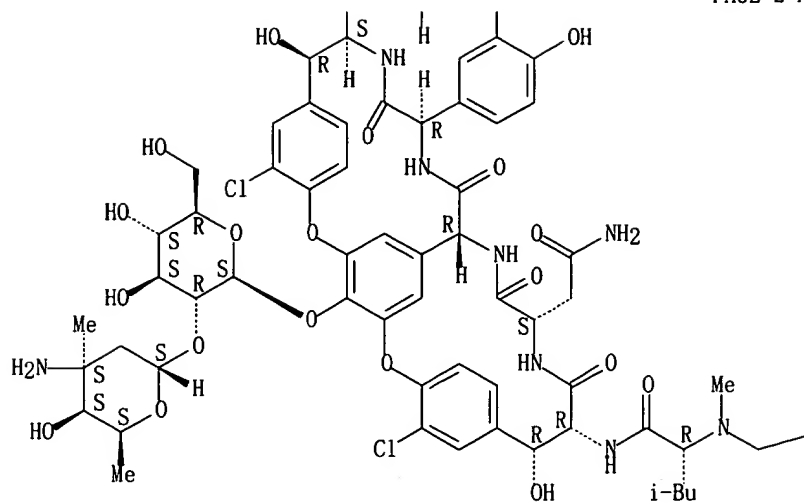
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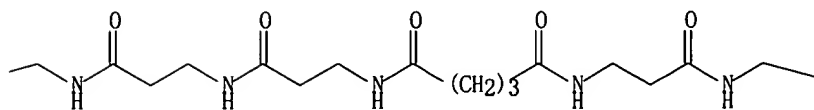
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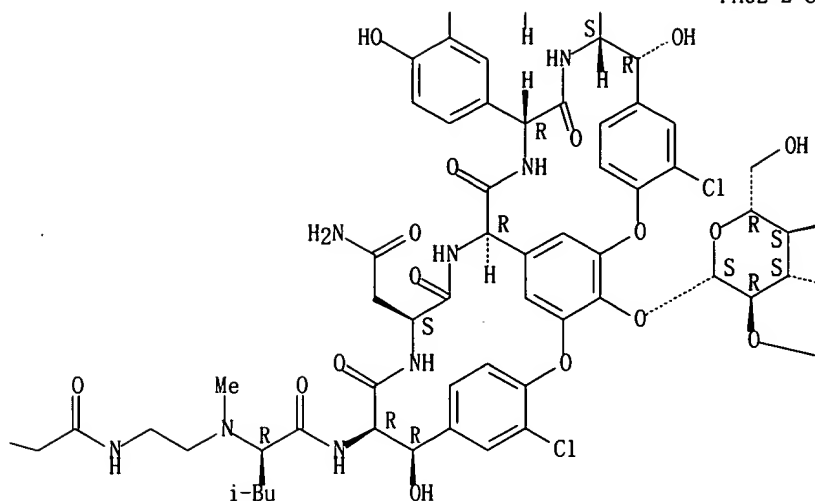
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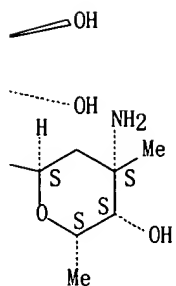
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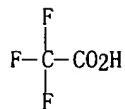
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CRN 76-05-1

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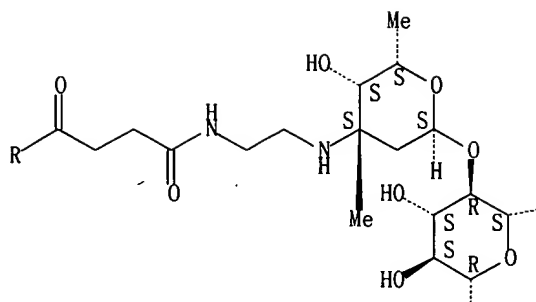


RN 239087-92-4 HCAPLUS

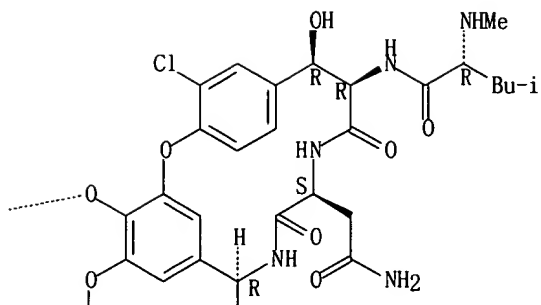
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(N3''.fwdarw.58)-amide with vancomycin (9CI) (CA INDEX NAME)

Absolute stereochemistry.

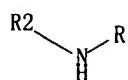
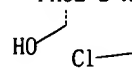
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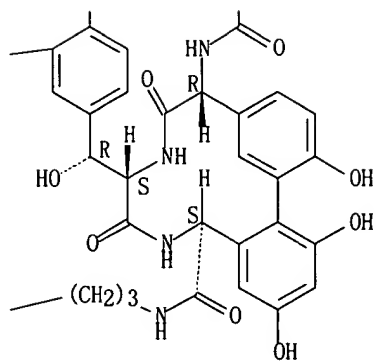
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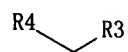
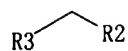
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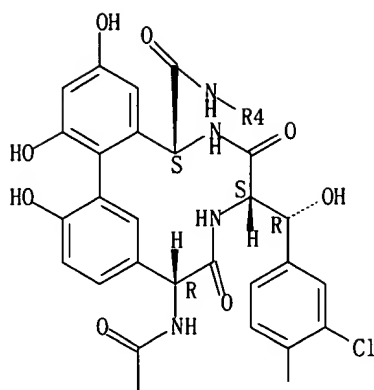
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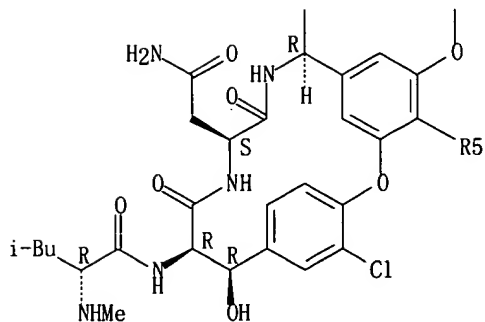
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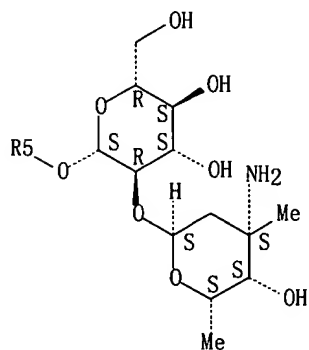
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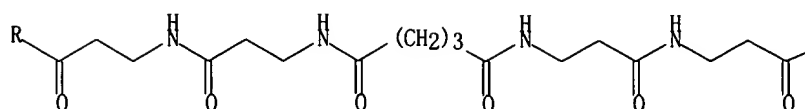


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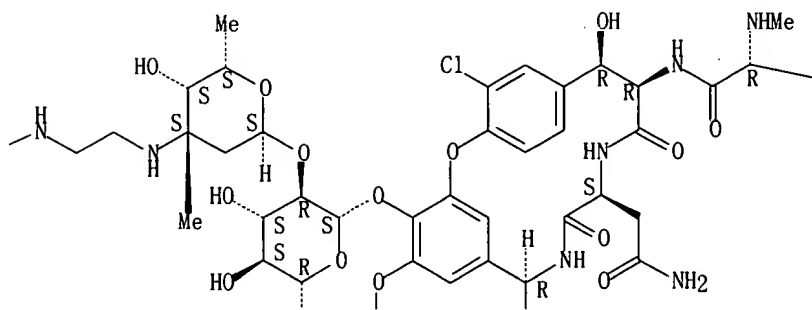
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Absolute stereochemistry.

PAGE 1-A



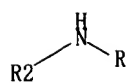
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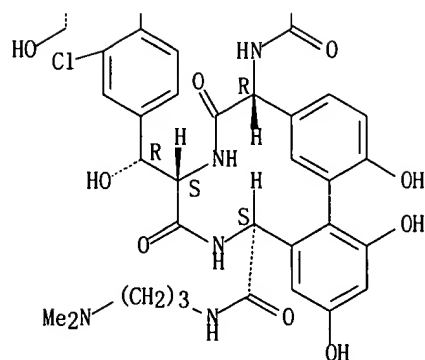
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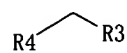
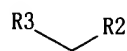
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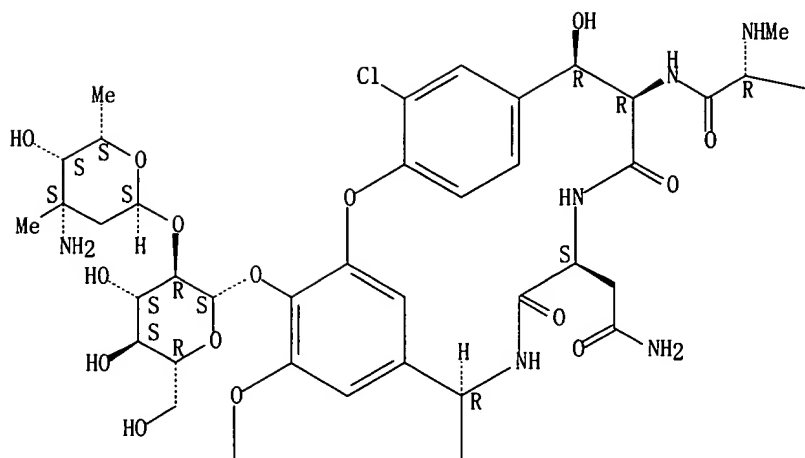


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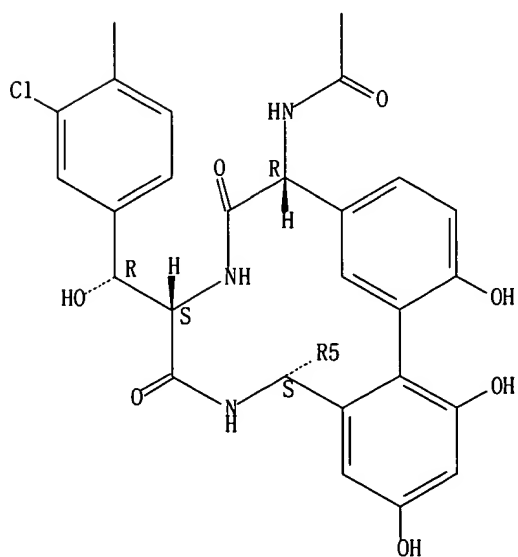


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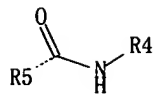
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-Bu-i



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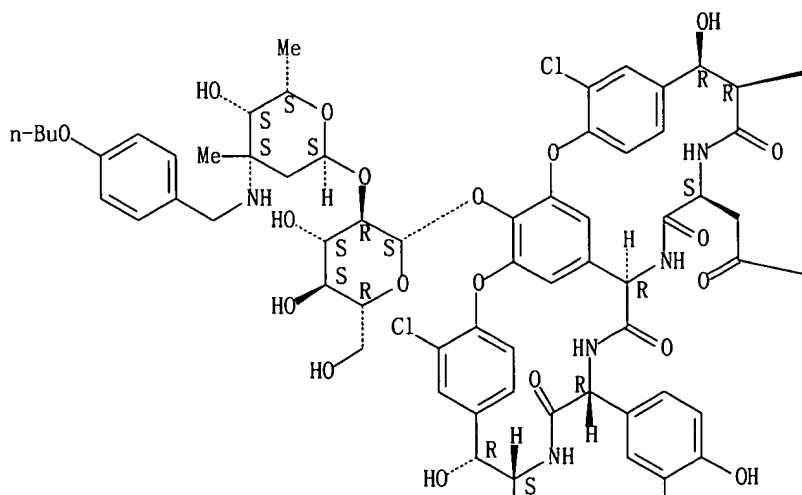
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 26-decarboxy-26-[[[3-(dimethylamino)propyl]amino]carbonyl]-,  
 (N3'',fwdarw.58)-amide with N3''-[4-butoxyphenyl)methyl]vancomycin,  
 trifluoroacetate (salt) (9CI) (CA INDEX NAME)

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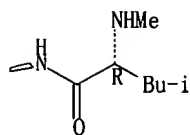
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Absolute stereochemistry.

PAGE 1-A

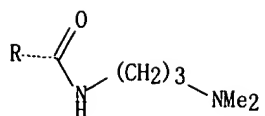
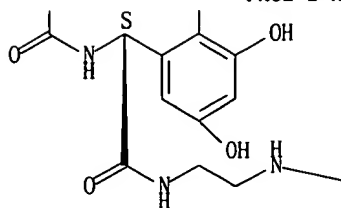


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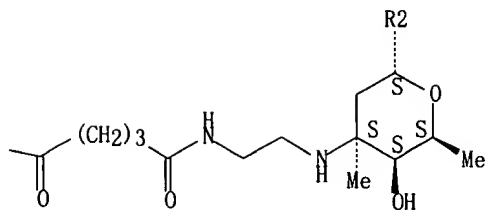


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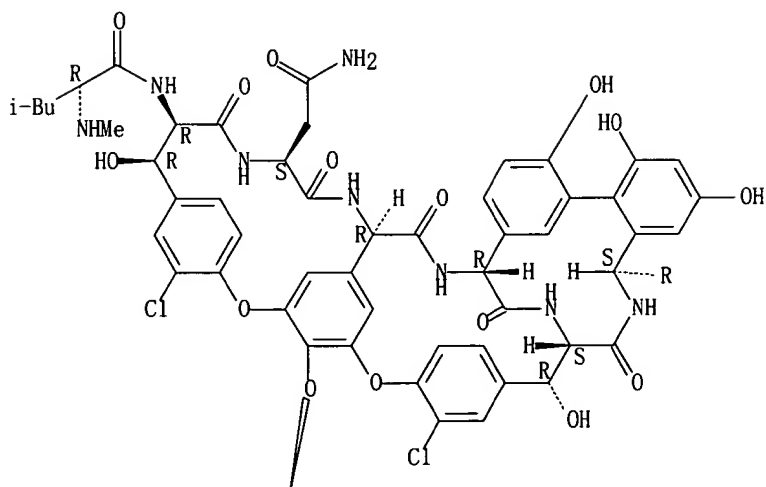
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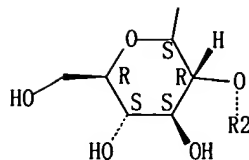
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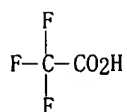
PAGE 4-A



CM 2

CRN 76-05-1

CMF C2 H F3 O2

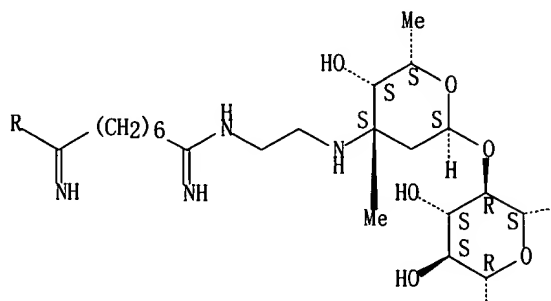


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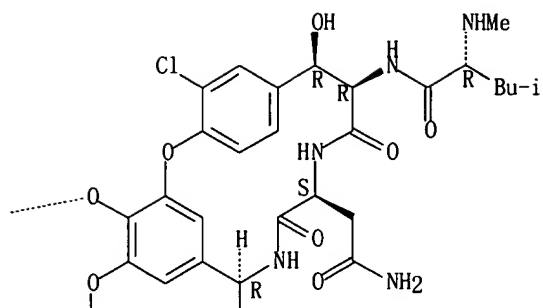
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Absolute stereochemistry.

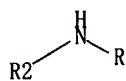
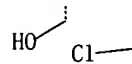
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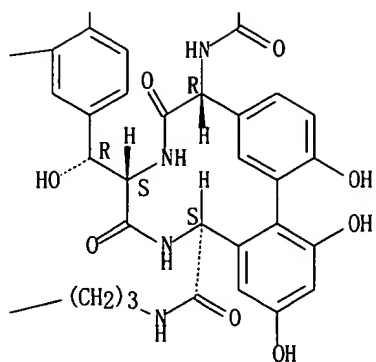
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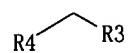
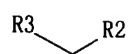
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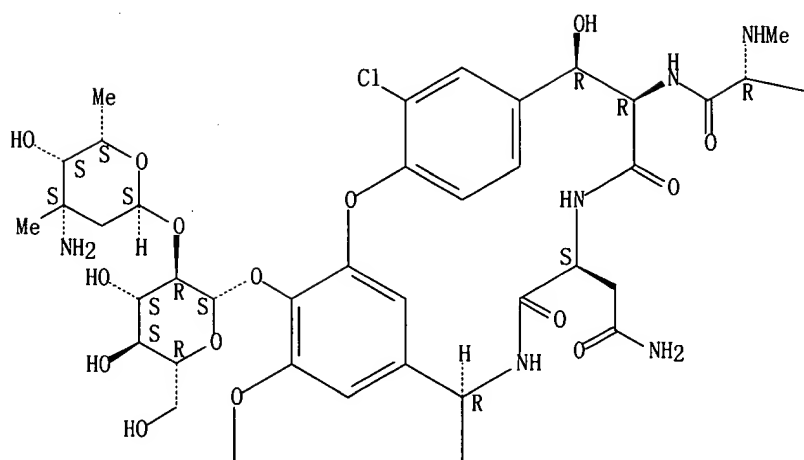
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PAGE 3-A

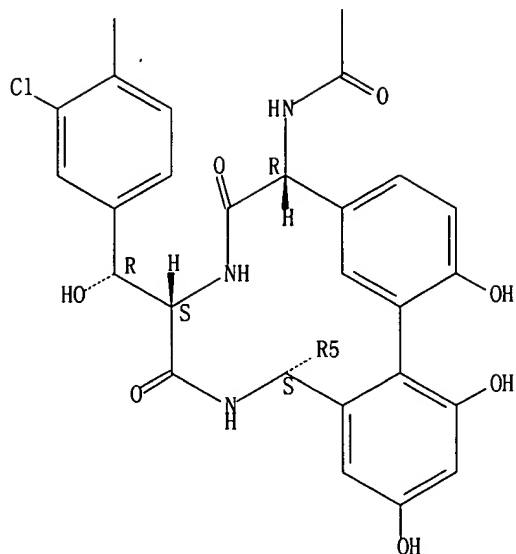


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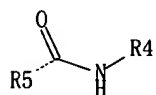


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—Bu-i



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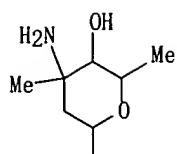
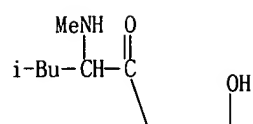
PAGE 7-A

RN 239088-11-0 HCAPLUS  
 CN Vancomycin, 56-(2-aminoethyl)-26-decarboxy-26-[[[3-(dimethylamino)propyl]amino]carbonyl]-, (56'',fwdarw.2')-amide with 1,1'-(1,5-dioxo-1,5-pentanediy)bis[.beta.-alanyl-.beta.-alanine] (2.fwdarw.26'')-amide with 26-[[[2-aminoethyl]amino]carbonyl]-26-decarboxyvancomycin, trifluoroacetate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 239088-10-9  
 CMF C158 H197 C14 N27 O52

PAGE 1-A

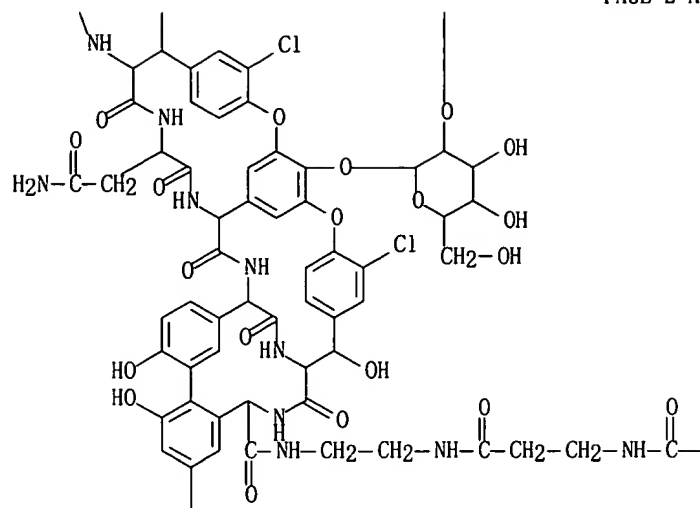


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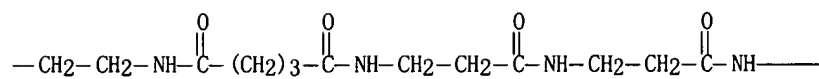




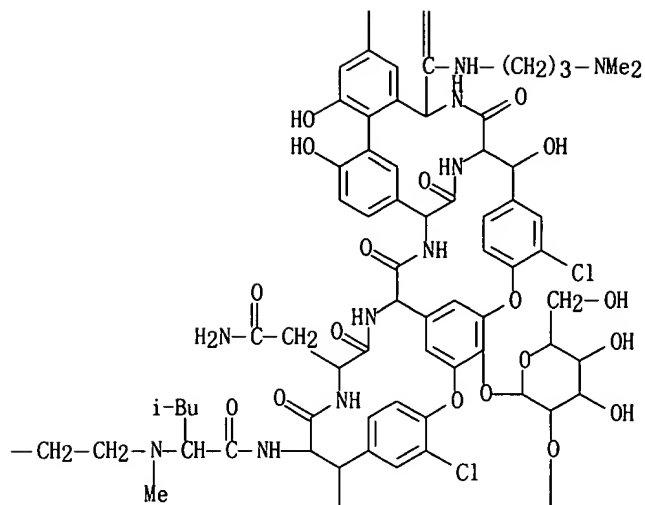
PAGE 2-A



PAGE 2-B



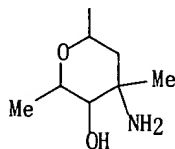
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PAGE 3-A

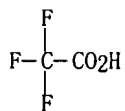


PAGE 3-C



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CRN 76-05-1  
CMF C2 H F3 O2

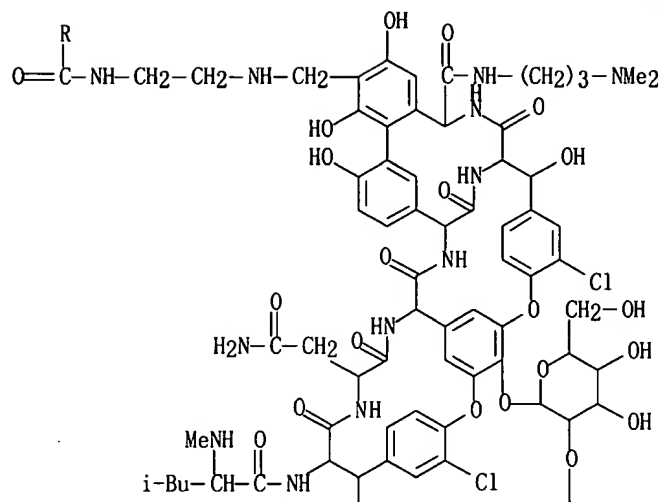


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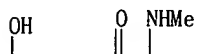
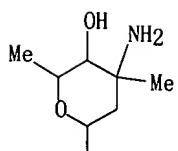
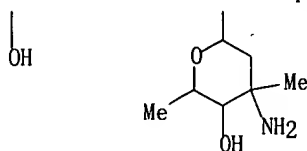
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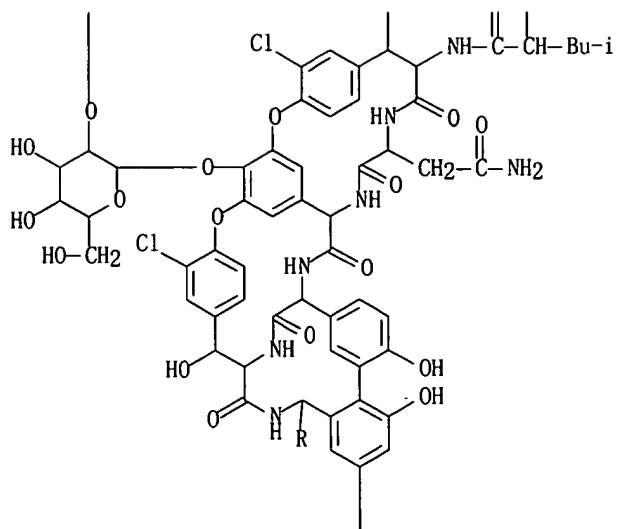
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PAGE 2-A



PAGE 3-A



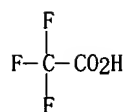
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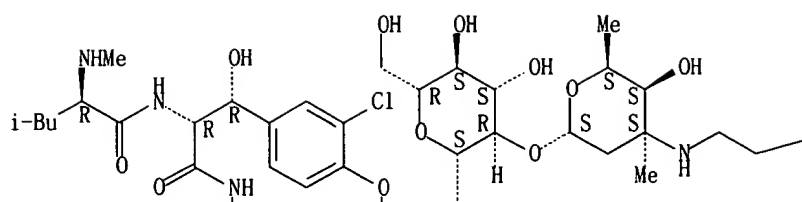


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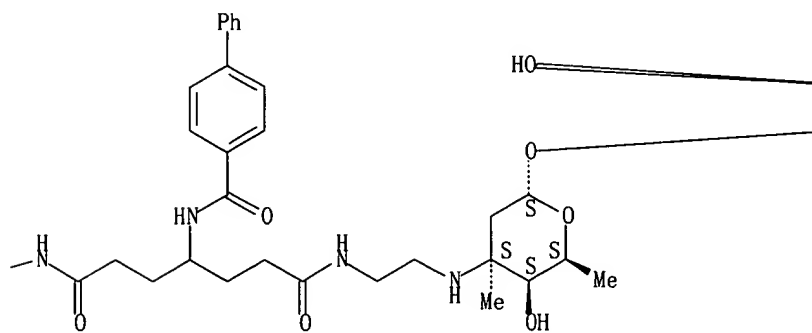
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Absolute stereochemistry.

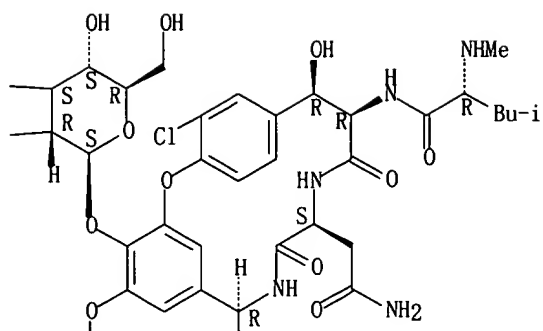
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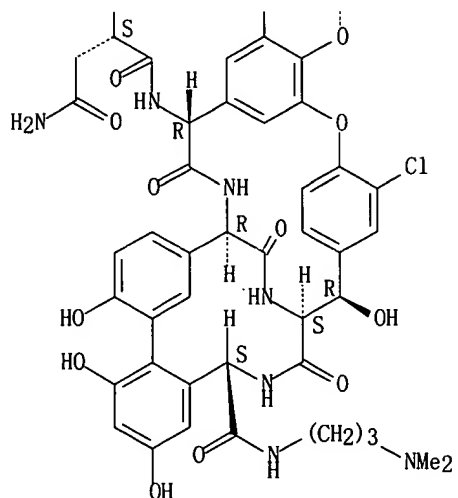
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PAGE 2-A

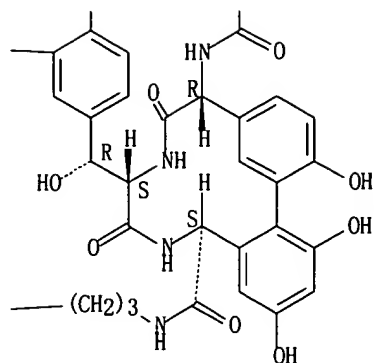


PAGE 2-B

Cl

Me<sub>2</sub>N

PAGE 2-C

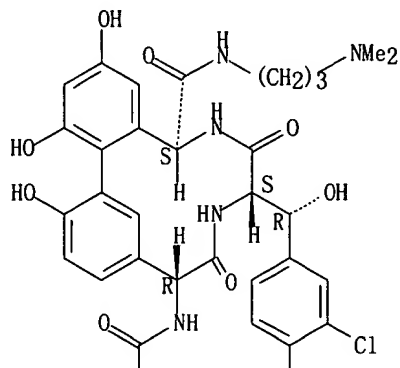


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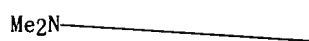
CN Vancomycin, N3'',N3''''-[[4-[(1,2-dioxopentadecyl)amino]-1,7-dioxo-1,7-heptanediyl]bis(imino-2,1-ethanediyl)]bis[26-decarboxy-26-[[[3-(dimethylamino)propyl]amino]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

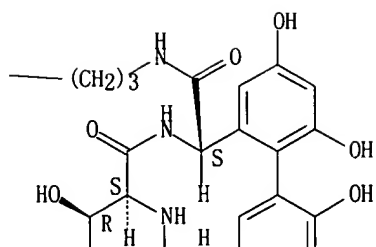
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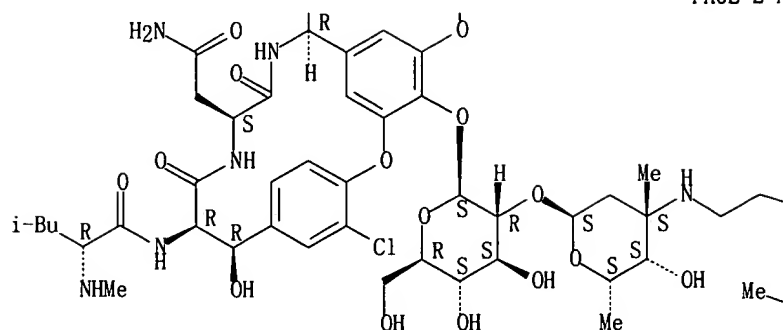
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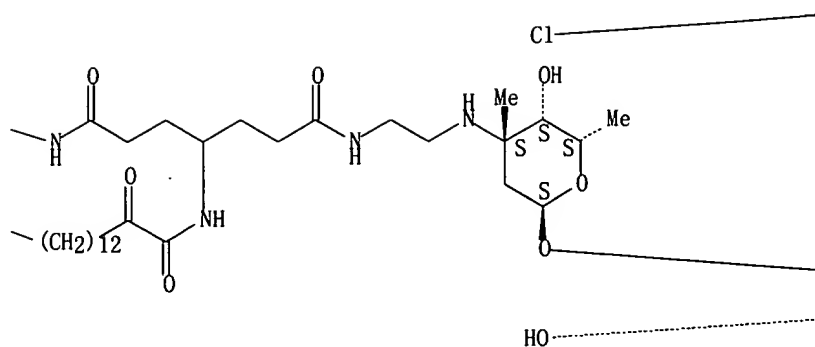


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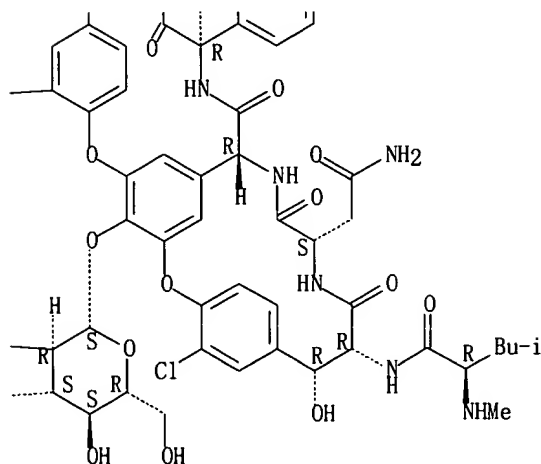




PAGE 2-B



PAGE 2-C

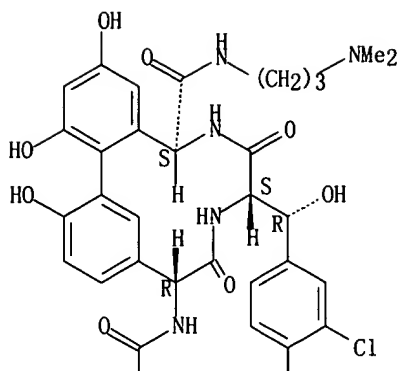


RN 239088-37-0 HCAPLUS

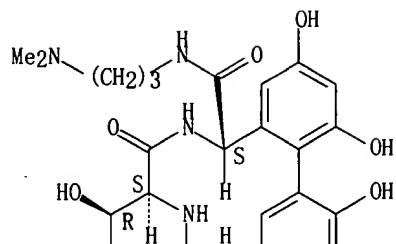
CN Vancomycin, N3'',N3''',-[[5-(phenylmethoxy)-1,3-phenylene]bis(carbonylimino-2,1-ethanediyl)]bis[26-decarboxy-26-[[[3-(dimethylamino)propyl]amino]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

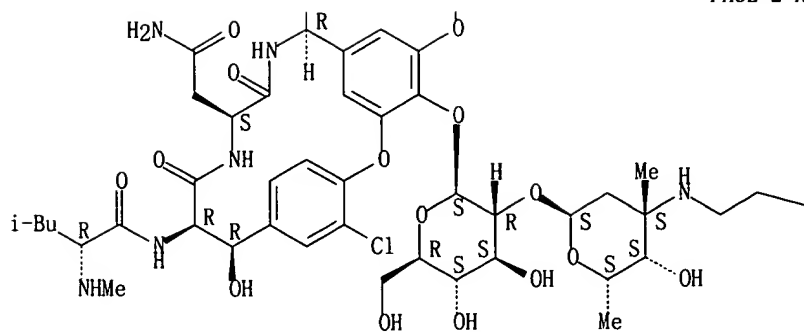
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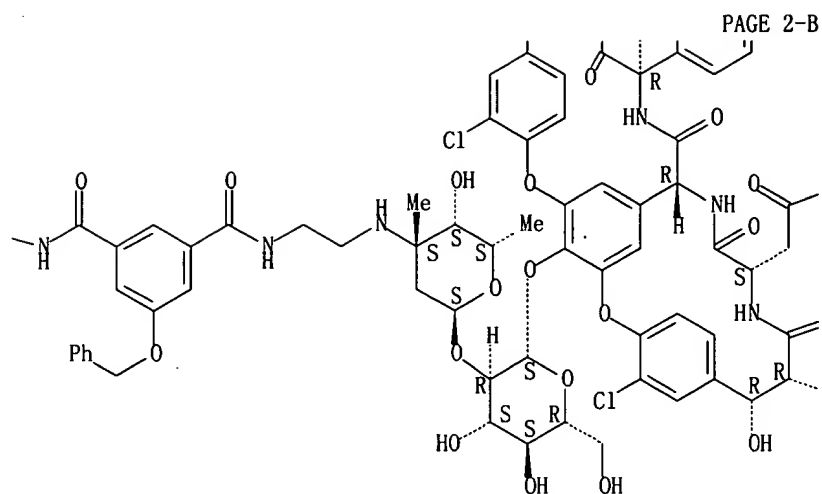


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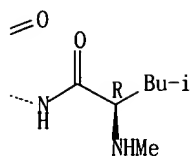


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PAGE 2-C

—NH<sub>2</sub>

L42 ANSWER 6 OF 17 HCAPLUS COPYRIGHT 2005 ACS on STN  
 AN 1999:152312 HCAPLUS  
 DN 130:196959  
 ED Entered STN: 09 Mar 1999  
 TI Solid-phase synthesis of N-substituted glycine peptide combinatorial  
 libraries and nitrogen heterocycle combinatorial libraries  
 IN Zuckermann, Ronald N.; Goff, Dane A.; Ng, Simon; Spear, Kerry; Scott,  
 Barbara O.; Sigmund, Aaron C.; Goldsmith, Richard A.; Marlowe, Charles K.;  
 Pei, Yazhong; Richter, Lutz; Simon, Reyna  
 PA Chiron Corporation, USA  
 SO U.S., 50 pp., Cont.-in-part of U.S. Ser. No. 277,228, abandoned.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 IC ICM C07K001-04  
 NCL 530334000  
 CC 34-3 (Amino Acids, Peptides, and Proteins)

Search done by Noble Jarrell

## Section cross-reference(s): 21

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5877278	A	19990302	US 1995-487282	19950607 <--
	EP 1258492	A1	20021120	EP 2002-77404	19930924 <--
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	US 5977301	A	19991102	US 1995-485106	19950607 <--
	CA 2221517	AA	19961219	CA 1996-2221517	19960604 <--
	WO 9640202	A1	19961219	WO 1996-US8832	19960604 <--
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	JP 11507049	T2	19990622	JP 1996-501317	19960604 <--
	AT 234268	E	20030315	AT 1996-921278	19960604 <--
	JP 2000239242	A2	20000905	JP 2000-38885	20000216 <--
	JP 3596752	B2	20041202		
	US 2002115612	A1	20020822	US 2002-71577	20020208 <--
PRAI	US 1992-950853	B2	19920924	<--	
	US 1993-126539	B2	19930924	<--	
	US 1994-277228	B2	19940718	<--	
	EP 1993-923131	A3	19930924	<--	
	JP 1994-508459	A3	19930924	<--	
	US 1995-454511	B3	19950530	<--	
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## CLASS

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	NCL	530334000
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EP 1258492	ECLA	C08G069/10 <--
US 5831005	ECLA	C07K001/04; C07K007/06A; C07K007/08A; C07K014/00B; C08G069/10 <--
US 5977301	ECLA	C08G069/10 <--
WO 9640202	ECLA	C07B061/00L; C07K001/04C <--
US 2002115612	ECLA	C07K001/04; C07K007/06A; C07K007/08A; C07K014/00B; C08G069/10 <--

AB A solid-phase method for the synthesis of N-substituted oligomers, such as poly(N-substituted glycines) (referred to herein as poly NSGs) is used to obtain oligomers, such as poly NSGs of potential therapeutic interest which poly NSGs can have a wide variety of side chain substituents. Each N-substituted glycine monomer is assembled from two "sub-monomers" directly on the solid support. Each cycle of monomer addition consists of two steps: (1) acylation of a secondary amine bound to the support with an acylating agent comprising a leaving group capable of nucleophilic displacement by NH<sub>2</sub>, such as a haloacetic acid, and (2) introduction of the side chain by nucleophilic displacement of the leaving group, such as halogen (as a solid support-bound .alpha.-haloacetamide) with a sufficient

amount of a second sub-monomer comprising an NH<sub>2</sub> group, such as a primary amine, alkoxyamine, semicarbazide, acyl hydrazide, carbazate, or the like. Repetition of the two step cycle of acylation and displacement gives the desired oligomers. The efficient synthesis of a wide variety of oligomeric NSGs using automated synthesis technol. of the present method makes these oligomers attractive candidates for the generation and rapid screening of diverse peptidomimetic libraries. The oligomers of the invention, such as N-substituted glycines (i.e. poly NSGs) disclosed here provide a new class of peptide-like compds. not found in nature, but which are synthetically accessible and have been shown to possess significant biol. activity and proteolytic stability. Combinatorial libraries of cyclic compds. are disclosed wherein the cyclic compds. are comprised of at least one ring structure derived from cyclization of a peptoid backbone. The diversity of product compds. is generated by the sequential addition of substituted submonomers. The combinatorial library includes 10 or more, preferably 100 or more, and more preferably 1,000 or more distinct and different compds. The library includes each of the product compds. in retrievable and analyzable amts. and preferably includes at least one biol. active compound. Methods of synthesizing the combinatorial libraries and assay devices produced using the libraries are disclosed, as is methodol. for screening for and obtaining biol. active cyclic organic compds.

- ST substituted glycine peptide combinatorial library solid phase prepn;  
nitrogen heterocycle peptidomimetic combinatorial library solid phase prepn
- IT Heterocyclic compounds  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(nitrogen, combinatorial library mixts.; solid-phase preparation of N-substituted glycine peptide combinatorial libraries and nitrogen heterocycle combinatorial libraries)
- IT Solid phase synthesis  
(peptide; solid-phase preparation of N-substituted glycine peptide combinatorial libraries and nitrogen heterocycle combinatorial libraries)
- IT Combinatorial library  
Peptide library  
Peptidomimetics  
Solid phase synthesis  
(solid-phase preparation of N-substituted glycine peptide combinatorial libraries and nitrogen heterocycle combinatorial libraries)
- IT Amino acids, reactions  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(solid-phase preparation of N-substituted glycine peptide combinatorial libraries and nitrogen heterocycle combinatorial libraries)
- IT 55-22-1, Isonicotinic acid, reactions 62-53-3D, Aniline, derivs. 64-04-0, Phenethylamine 70-11-1, .alpha.-Bromoacetophenone 78-81-9, Isobutylamine 79-08-3, Bromoacetic acid 79-08-3D, Bromoacetic acid, derivs. 79-10-7D, Acrylic acid, derivs. 88-67-5D, 2-Iodobenzoic acid, derivs. 98-16-8, 3-Aminobenzotrifluoride 100-46-9, Benzylamine, reactions 100-46-9D, Benzylamine, derivs. 495-69-2, Hippuric acid 553-26-4, 4,4'-Bipyridyl 578-54-1, 2-Ethylaniline 584-93-0, .alpha.-Bromovaleric acid 609-67-6, o-Iodobenzoyl chloride 609-67-6D, 2-Iodobenzoyl chloride, derivs. 625-35-4, trans-Crotonyl chloride 930-88-1 1631-26-1, N-Benzylmaleimide 13991-36-1, trans-4-Bromo-2-butenic acid 13991-36-1D, derivs. 35323-09-2, 4,5-Dimethoxy-2-iodophenylacetic acid 35661-39-3 39959-51-8, 2-Iodobenzylamine 39959-51-8D, 2-Iodobenzylamine, derivs. 66384-48-3 66384-49-4D, o-Iodophenethylamine, derivs. 77159-78-5, 2,6-Dibromo-4-ethylphenyl isocyanate 213964-76-2D, derivs.  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(solid-phase preparation of N-substituted glycine peptide combinatorial

libraries and nitrogen heterocycle combinatorial libraries)

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 34037-21-3DP, Morpholine-2,5-dione, combinatorial library derivs.  
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 220827-02-IDP, combinatorial library derivs.  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (solid-phase preparation of N-substituted glycine peptide combinatorial  
 libraries and nitrogen heterocycle combinatorial libraries)

RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Anon; EP 1037474 1966
- (2) Anon; DE 2447305 1975 HCAPLUS
- (3) Cook; US 5539083 1996 HCAPLUS
- (4) Cosani, A; Macromolecules 1978, V11(5), P1041 HCAPLUS
- (5) Ellman; US 5288514 1994 HCAPLUS
- (6) Geysen; US 5194392 1993 HCAPLUS
- (7) Greenbelt; US 3634364 1972 HCAPLUS
- (8) Huebner; US 5182366 1993 HCAPLUS
- (9) Kasica, H; Journal of Polymer Science Part A-1 V6, P1615 HCAPLUS
- (10) Marcincin, A; Plasty Kauc 1975, V12, P101 HCAPLUS
- (11) Pirrung; US 5143854 1992 HCAPLUS
- (12) Rutter; US 5225533 1993 HCAPLUS
- (13) Rutter; US 5266684 1993 HCAPLUS
- (14) Simon, R; Proc Natl Acad Sci USA 1992, V89, P9367 HCAPLUS
- (15) Zuckerman, R; Chemtracts-Macromolecular Chemistry 1993, V4, P80
- (16) Zuckerman, R; J Am Chem Soc 1992, V114, P10646
- (17) Zuckermann; US 5252296 1993

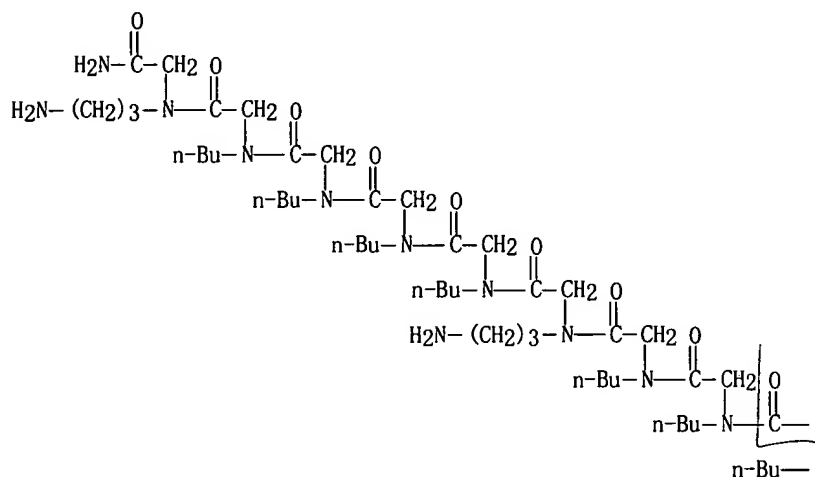
IT 145251-31-6P

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (solid-phase preparation of N-substituted glycine peptide combinatorial  
 libraries and nitrogen heterocycle combinatorial libraries)

RN 145251-31-6 HCAPLUS

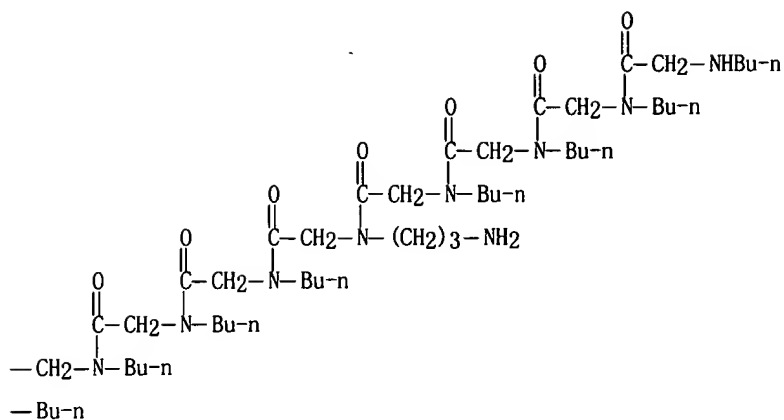
CN Glycinamide, N-butylglycyl-N-butylglycyl-N-butylglycyl-N-butylglycyl-N-(3-aminopropyl)glycyl-N-butylglycyl-N-butylglycyl-N-butylglycyl-N-butylglycyl-N-(3-aminopropyl)glycyl-N-butylglycyl-N-butylglycyl-N-butylglycyl-N-(3-aminopropyl)glycyl-N-butylglycyl-N-butylglycyl-N-butylglycyl-N-butylglycyl-N2-(3-aminopropyl)- (9CI) (CA INDEX NAME)

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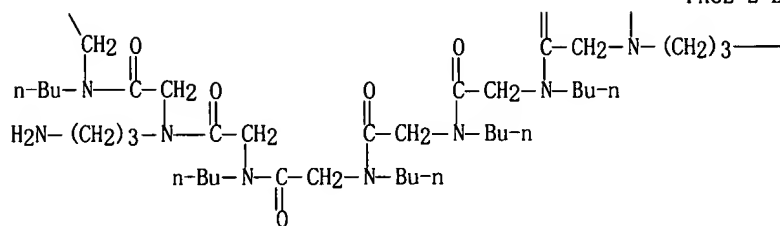


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PAGE 2-C

$$-\text{NH}_2$$

L42 ANSWER 7 OF 17 HCAPLUS COPYRIGHT 2005 ACS on STN  
AN 1998:747618 HCAPLUS  
DN 130:11778  
ED Entered STN: 25 Nov 1998  
TI Complex formation between dsDNA and oligomer of heterocycles  
IN Dervan, Peter  
PA California Institute of Technology, USA  
SO PCT Int. Appl., 68 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
IC ICM C12Q001-68  
ICS C12Q001-70; C12P019-34; C07H021-04; C07H021-02; A61K041-00  
CC 6-2 (General Biochemistry)  
Section cross-reference(s): 3  
FAN.CNT 11

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9850582	A1	19981112	WO 1997-US12722	19970721 <--
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US 6635417 B1 20031021 US 1997-853522 19970508 <--  
 CA 2288806 AA 19981112 CA 1997-2288806 19970721 <--  
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 AU 746656 B2 20020502  
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CN 1260006 A 20000712 CN 1997-182276 19970721 <--  
 JP 2002514082 T2 20020514 JP 1998-548010 19970721 <--  
 CA 2281947 AA 19980827 CA 1998-2281947 19980121 <--  
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 AU 734715 B2 20010621  
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AU 9867576 A1 19981030 AU 1998-67576 19980129 <--  
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EP 1023288 A1 20000802 EP 1998-912894 19980129 <--  
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 AU 749953 B2 20020704  
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EP 986539	A1	20000322	EP 1998-918047	19980408 <--
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US 6506906	B1	20030114	US 1999-414611	19991008 <--
US 6555692	B1	20030429	US 2001-921514	20010801 <--
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US 1996-607078	A2	19960226	<--	
US 1996-23309P	P	19960731	<--	
US 1996-24374P	P	19960801	<--	
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US 1997-38384P	P	19970214	<--	
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WO 1998-US1006	W	19980121	<--	
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WO 1998-US2444	W	19980211	<--	
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WO 1998-US6997	W	19980408	<--	
US 1999-414611	A1	19991008	<--	

## CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
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WO 9850582	ECLA	C07D207/34; C07D233/90; C07D403/14R+233+207; C07D403/14R+231+207; C07K007/02 <--
US 6635417	ECLA	A61K047/48R2T; C07D207/34; C07D233/90; C07D403/14R+233+207; C07D403/14R+231+207; C07K007/02<--
WO 9845284	ECLA	A61K047/48K6; C07D207/34; C07D233/90; C07D403/14R+233+207; C07D403/14R+231+207;

C07K005/06H2C; C07K007/02; C07K007/04; C08G069/00;  
 C12Q001/68B12 <--  
 WO 9835702 ECLA A61K047/48R2T <--  
 WO 9849142 ECLA C07D207/34; C07D233/90; C07D403/14R+233+207;  
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 C07K007/04; C08G069/00; C12Q001/68B12; G01T001/20A;  
 G01T001/202 <--  
 AB Methods and compns. are provided for forming complexes between dsDNA and  
 oligomers of heterocycles, aliphatic amino acids, particularly omega-amino  
 acids, and a polar end group. By appropriate choice of target sequences  
 and composition of the oligomers, complexes are obtained with low dissociation  
 consts. The formation of complexes can be used for identification of  
 specific dsDNA sequences, for inhibiting gene transcription, and as a  
 therapeutic for inhibiting proliferation of undesired cells or expression  
 of undesired genes. A polyamide which binds to the DNA sequence AGTACT is  
 described.  
 ST transcriptional regulation polyamide DNA interaction alanine  
 IT Amino acids, biological studies  
 RL: BSU (Biological study, unclassified); PRP (Properties); BIOL  
 (Biological study)  
 (DNA complexes with; complex formation between dsDNA and oligomer of  
 heterocycles)  
 IT Chromosome  
 Virus  
 (DNA of; complex formation between dsDNA and oligomer of heterocycles)  
 IT Polyamides, biological studies  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (DNA-binding; complex formation between dsDNA and oligomer of  
 heterocycles)  
 IT Transcription factors  
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL  
 (Biological study); PROC (Process)  
 (TFIIIA (transcription factor IIIA), polyamide effect on; complex  
 formation between dsDNA and oligomer of heterocycles)  
 IT Molecular association  
 Transcriptional regulation  
 (complex formation between dsDNA and oligomer of heterocycles)  
 IT DNA  
 RL: BSU (Biological study, unclassified); PRP (Properties); BIOL  
 (Biological study)  
 (complex formation between dsDNA and oligomer of heterocycles)  
 IT DNA  
 RL: BSU (Biological study, unclassified); PRP (Properties); BIOL  
 (Biological study)  
 (double-stranded; complex formation between dsDNA and oligomer of  
 heterocycles)  
 IT Gene  
 (regulation; complex formation between dsDNA and oligomer of  
 heterocycles)  
 IT 180530-17-OP 180530-18-1P 191916-04-8P

RL: BSU (Biological study, unclassified); SPN (Synthetic preparation);  
 BIOL (Biological study); PREP (Preparation)  
 (DNA complexes with; complex formation between dsDNA and oligomer of  
 heterocycles)

IT 26062-48-6, Polyhistidine 26854-81-9, Polyhistidine

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (DNA-binding; complex formation between dsDNA and oligomer of  
 heterocycles)

IT 191916-06-0P

RL: BSU (Biological study, unclassified); SPN (Synthetic preparation);  
 BIOL (Biological study); PREP (Preparation)  
 (double-stranded; complex formation between dsDNA and oligomer of  
 heterocycles)

IT 58-85-5, Biotin 20830-75-5, Digoxin

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (in DNA complex; complex formation between dsDNA and oligomer of  
 heterocycles)

IT 56-12-2, .gamma.-Aminobutyric acid, biological studies 56-40-6, Glycine,  
 biological studies 107-95-9, .beta.-Alanine

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (in oligomer; complex formation between dsDNA and oligomer of  
 heterocycles)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Cook; US 5459255 A 1995 HCAPLUS
- (2) Dervan; US 4795700 A 1989 HCAPLUS
- (3) Lown; US 4912199 A 1990 HCAPLUS
- (4) Lown; US 5616606 A 1997 HCAPLUS

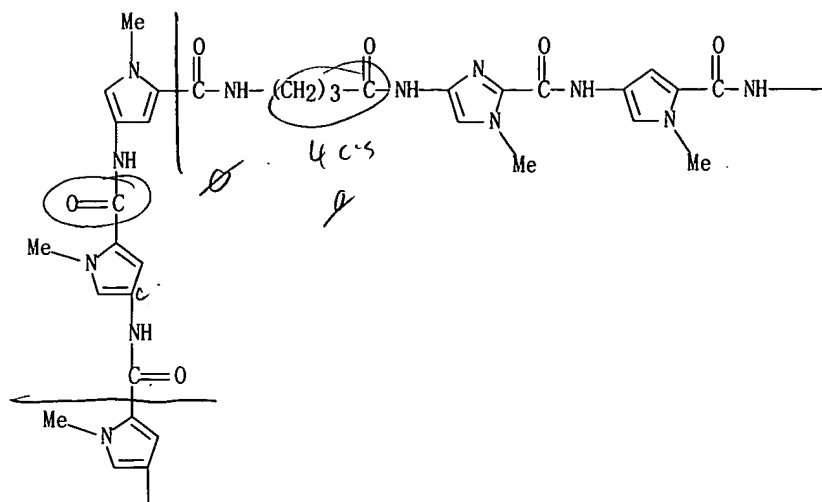
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RL: BSU (Biological study, unclassified); SPN (Synthetic preparation);  
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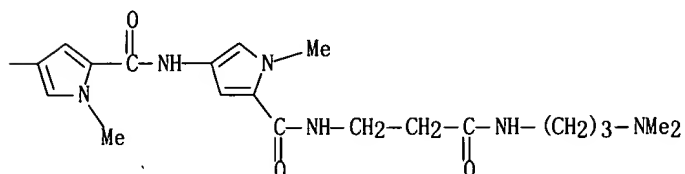
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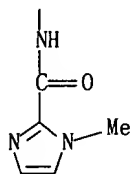
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PAGE 1-B



PAGE 2-A



L42 ANSWER 8 OF 17 HCAPLUS COPYRIGHT 2005 ACS on STN  
 AN 1998:744963 HCAPLUS  
 DN 130:14267  
 ED Entered STN: 24 Nov 1998  
 TI Sequence specificity in complex formation between double stranded DNA and heterocycle oligomers  
 IN Dervan, Peter; Gottesfield, Joel M.  
 PA California Institute of Technology, USA  
 SO PCT Int. Appl., 63 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 IC ICM A61K038-00  
 ICS A61K038-04; A61K038-08; C12Q001-68; C12N005-00; C12N005-06  
 CC 34-3 (Amino Acids, Peptides, and Proteins)

Section cross-reference(s): 1, 3, 28

FAN.CNT 11

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9850058	A1	19981112	WO 1997-US12733	19970721 <--
W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
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AU 747998	B2	20020530		
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PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
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AB Methods and compns. are provided for forming complexes intracellularly between dsDNA and oligomers of heterocycles, aliphatic amino acids, particularly .omega.-amino acids, and a polar end group. By appropriate choice of target sequences and composition of the oligomers, complexes are obtained with low dissociation consts. The formation of complexes can be used for modifying the phenotype of cells, either prokaryotic or eukaryotic, for research and therapy.

ST nitrogen heterocycle oligomer sequence specific DNA binding; imidazole pyrrole oligomer sequence specific DNA binding

IT DNA

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
(double-stranded; sequence specificity in complex formation between double stranded DNA and heterocycle oligomers)

IT DNA sequences

Gene therapy

(sequence specificity in complex formation between double stranded DNA and heterocycle oligomers)

IT 180530-17-OP 180530-18-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(sequence specificity in complex formation between double stranded DNA and heterocycle oligomers)

IT 179259-17-7P 215437-51-7P 215437-59-5P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (sequence specificity in complex formation between double stranded DNA and heterocycle oligomers)

IT 216010-78-5 216010-79-6 216010-85-4 216010-86-5  
 RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)  
 (sequence specificity in complex formation between double stranded DNA and heterocycle oligomers)

IT 76-02-8, Trichloroacetyl chloride 96-54-8, N-Methylpyrrole 616-47-7, N-Methylimidazole 23911-25-3, EDTA dianhydride 57294-38-9, 4-tert-Butoxycarbonylaminobutyric acid  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (sequence specificity in complex formation between double stranded DNA and heterocycle oligomers)

IT 13138-76-6P, Methyl 1-methyl-4-nitro-2-pyrrolicarboxylate 21898-65-7P, 1-Methyl-2-(trichloroacetyl)pyrrole 30148-21-1P, Ethyl 1-methylimidazole-2-carboxylate 72083-62-6P, Methyl 4-amino-1-methyl-2-pyrrolicarboxylate 77716-11-1P 77716-16-6P 109012-23-9P 120122-47-6P 128293-62-9P 128293-64-1P 180258-47-3P 180258-48-4P 195387-60-1P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (sequence specificity in complex formation between double stranded DNA and heterocycle oligomers)

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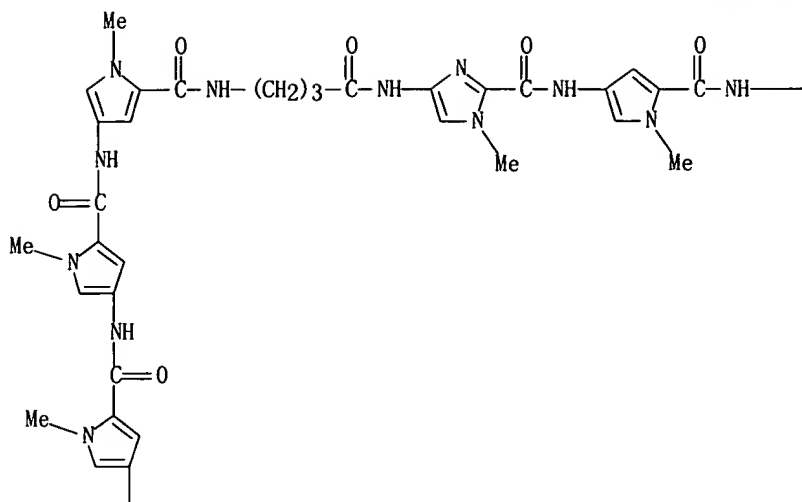
RE  
 (1) Cho; Proc Natl Acad Sci USA 1995, V92, P10389 HCAPLUS  
 (2) Kelly; Proc Natl Acad Sci USA 1996, V93, P6981 HCAPLUS  
 (3) Mrkisch; J Am Chem Soc 1994, V116, P3663  
 (4) Pilch; Proc Natl Acad Sci USA 1996, V93, P8306 HCAPLUS  
 (5) Trauger; Nature 1996, V382, P559 HCAPLUS  
 (6) Wade; J Am Chem Soc 1992, V114, P8783 HCAPLUS  
 (7) White; Biochemistry 1996, V35(38), P12532 HCAPLUS

IT 180530-17-0P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (sequence specificity in complex formation between double stranded DNA and heterocycle oligomers)

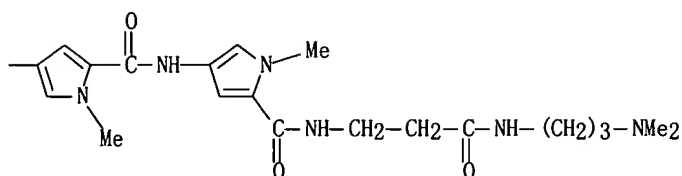
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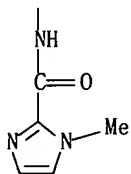
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PAGE 1-B



PAGE 2-A



L42 ANSWER 9 OF 17 HCAPLUS COPYRIGHT 2005 ACS on STN  
 AN 1998:721676 HCAPLUS  
 DN 129:343723  
 ED Entered STN: 13 Nov 1998  
 TI Preparation of DNA-binding pyrrole and imidazole polyamide derivatives  
 IN Dervan, Peter B.  
 PA California Institute of Technology, USA  
 SO PCT Int. Appl., 243 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 IC ICM C07D207-34  
 ICS C07D233-90; A61K031-415; C07D403-14  
 CC 34-3 (Amino Acids, Peptides, and Proteins)  
 Section cross-reference(s): 1, 6



FAN.CNT 11

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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## CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
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US 6635417	ECLA	A61K047/48R2T; C07D207/34; C07D233/90; <--

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GI		

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Novel small mol. polyamides I [each R1, R5, R7, R8, R10 = independently H, Cl, NO, Ac, PhCH2, C1-6 alkyl, C1-6 alkylamine, C1-6 alkyldiamine, C1-6 alkylcarboxylate, C1-6 alkenyl, C1-6 alkynyl; R2 = H, NH2, SH, Cl, Br, F, Ac, CHO; each R3, R6, R9, R11 = independently H, NH2, OH, SH, Br, Cl, F, OMe, CH2OH, CH2SH, CH2NH2; R4 = NH(CH2)0-6NR12R13, NH(CH2)0-6CONH(CH2)0-6NR12R13, NHR12, NH(CH2)0-6CONHR12; R12, R13 = independently H, Cl, NH, Ac, CH2Ph, C1-6 alkyl, C1-6 alkylamine, C1-6 alkyldiamine, C1-6 alkylcarboxylate, C1-6 alkenyl, C1-6-L; L = biotin, oligodeoxynucleotide, N-ethylnitrosourea, fluorescein, bromoacetamide, iodoacetamide, DL-.alpha.-lipoic acid, acridine, Ethyl Red, 4-(psoralen-8-yloxy)butyrate, tartaric acid, (+)-.alpha.-tocopheral, C1-6 alkynyl; each X-X4 = independently N, CH, C(OH), CMe, CNH2, CCl, CF; each a, c, e, h = independently 0-10; each b, d, f, g, i, m, n, p, q = independently 0-5] that specifically bind with subnanomolar affinity to any predetd. sequence in the human genome with potential use in mol. biol. and human medicine are described. Further, the designed compds. which target the minor groove of B-form double helical DNA offer a general approach for the control of gene-expression. Simple rules are disclosed which provide for rational control of the DNA-binding sequence specificity of synthetic polyamides containing N-methylpyrrole and N-methylimidazole amino acids. A series of mol. templates for polyamide design are disclosed which provide for small mols. which recognize predetd. DNA sequences with affinities and specificities comparable to sequence specific DNA-binding proteins such as transcription factors. Thus, designed polyamide II, prepared by solid-phase methods, showed recognition for oligonucleotide 5'-AACCAAGTCTTGGTA-3' with Ka = 4 .times. 10<sup>8</sup> M<sup>-1</sup>, and specificities of 11 and 19 for the match site vs. a center mismatch and an edge mismatch, resp.

ST pyrrole imidazole polyamide prepn DNA binding; sequence specificity pyrrole polyamide DNA binding

IT DNA sequences  
(preparation and sequence specificity of DNA-binding pyrrole and imidazole polyamide derivs.)

IT DNA  
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
(preparation and sequence specificity of DNA-binding pyrrole and imidazole polyamide derivs.)

IT

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215438-41-8P 215438-42-9P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation and sequence specificity of DNA-binding pyrrole and imidazole polyamide derivs.)

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RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation and sequence specificity of DNA-binding pyrrole and imidazole polyamide derivs.)

IT 84640-20-0 94855-03-5 193743-33-8 215517-33-2 215517-35-4  
 215517-37-6

RL: PRP (Properties)

(preparation and sequence specificity of DNA-binding pyrrole and imidazole polyamide derivs.)

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 3-(N,N-Dimethylamino)propylamine 616-47-7, 1-Methylimidazole  
 20485-43-2 23911-25-3, EDTA dianhydride 57294-38-9,  
 4-(tert-Butoxycarbonylamino)butyric acid 66442-94-2, p-Carboxymethidium  
 78486-18-7 79642-50-5 122745-41-9 126093-01-4 215437-88-0

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation and sequence specificity of DNA-binding pyrrole and imidazole polyamide derivs.)

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 1-Methyl-2-trichloroacetylpyrrole 30148-21-1P, Ethyl  
 1-methylimidazole-2-carboxylate 77716-11-1P 77716-16-6P 109012-23-9P  
 120122-47-6P 128293-64-1P 180076-91-9P 180258-45-1P  
 180258-46-2P 180258-47-3P 180258-48-4P 195387-60-1P 215437-77-7P  
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RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and sequence specificity of DNA-binding pyrrole and imidazole polyamide derivs.)

RE. CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Baird, E; JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 1996, V118(26), P6141 HCAPLUS
- (2) California Institute Of Technology; WO 9730975 A 1997 HCAPLUS
- (3) Herman, D; JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 1998, V120(7), P1382 HCAPLUS
- (4) Parks, M; JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 1996, V118(26), P6147 HCAPLUS
- (5) Parks, M; JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 1996, V118(26), P6153

## HCAPLUS

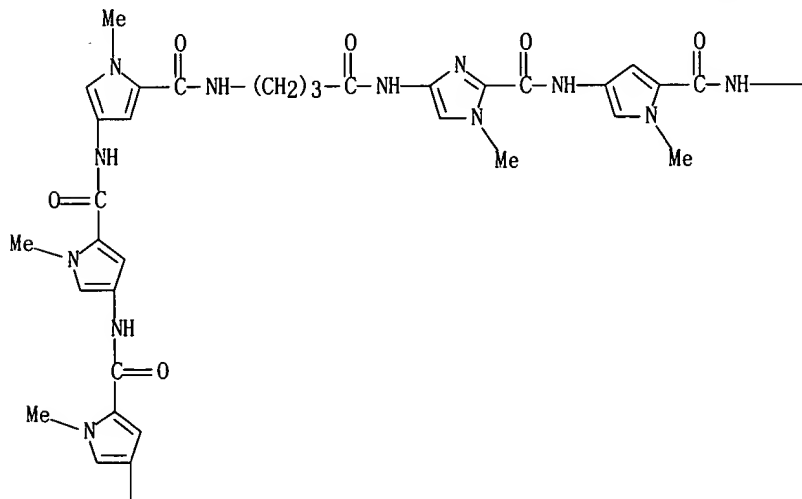
- (6) Swalley, S; CHEMISTRY - A EUROPEAN JOURNAL 1997, V3(10), P1600 HCAPLUS  
 (7) Swalley, S; JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 1996, V118(35), P8198 HCAPLUS  
 (8) Swalley, S; JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 1997, V119(30), P6953 HCAPLUS  
 (9) Trauger, J; NATURE 1996, V382(6591), P559 HCAPLUS  
 (10) Turner, J; JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 1997, V119(33), P7634  
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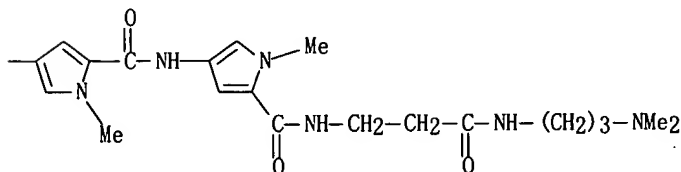
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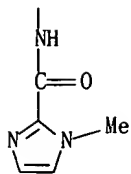
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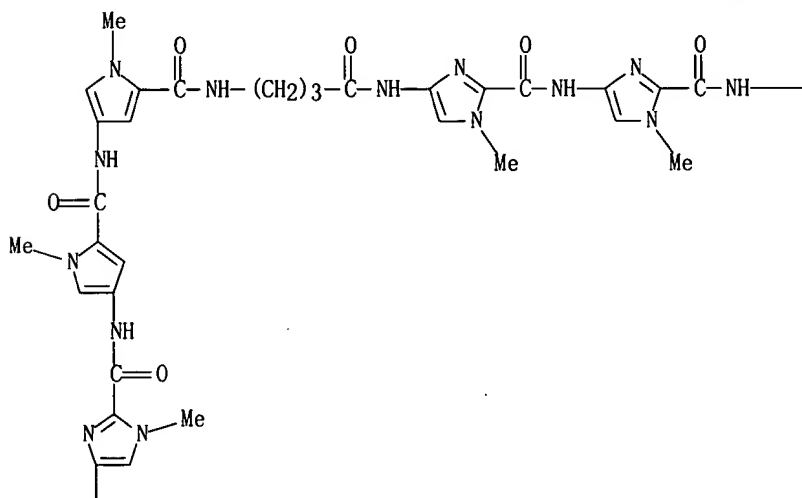
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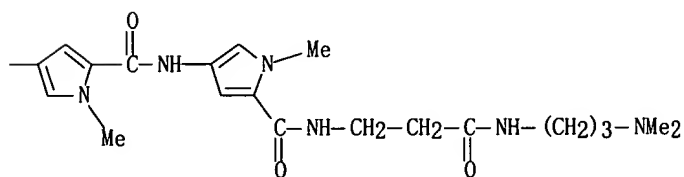
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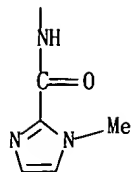
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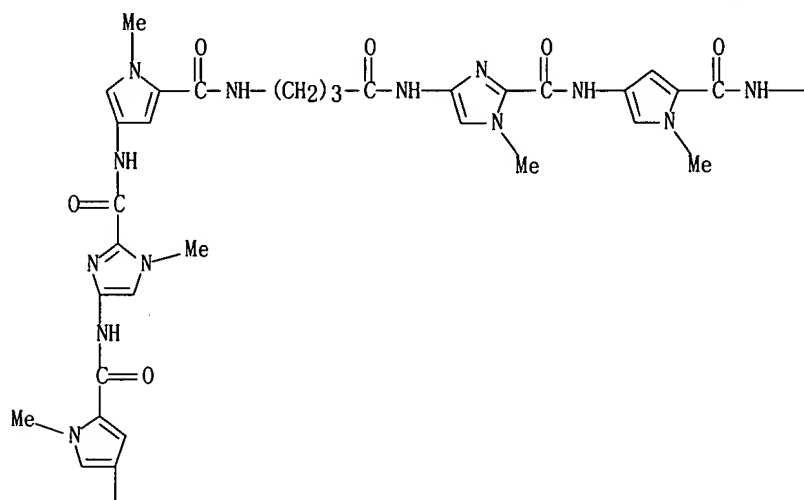
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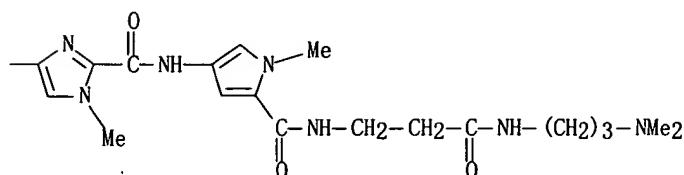
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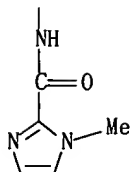
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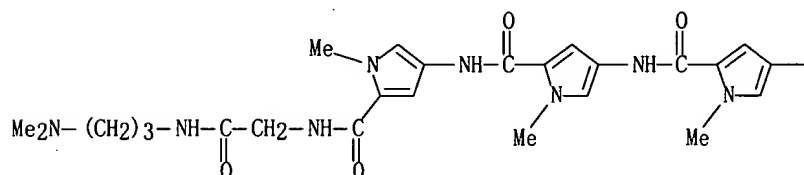
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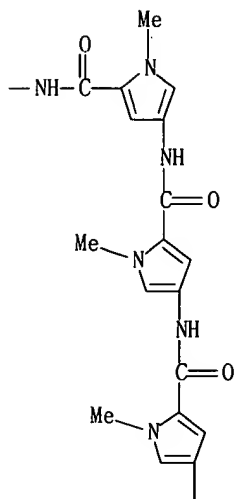
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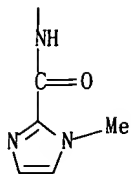
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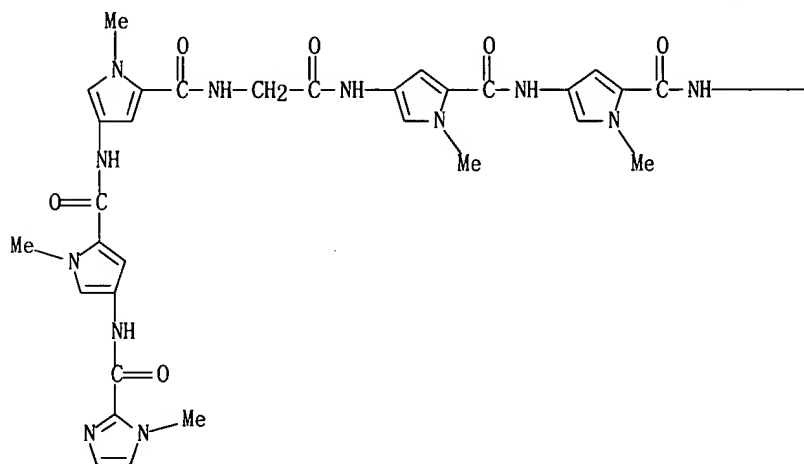
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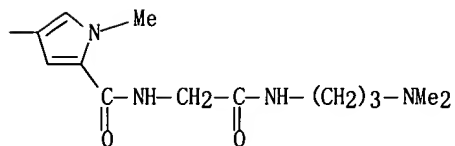
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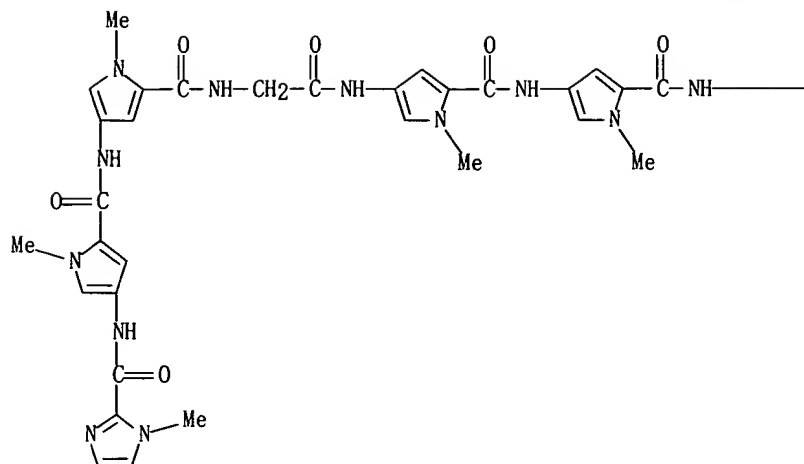


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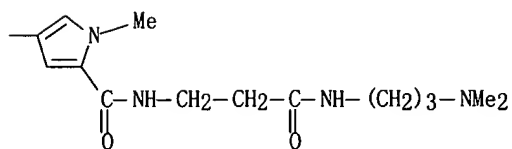
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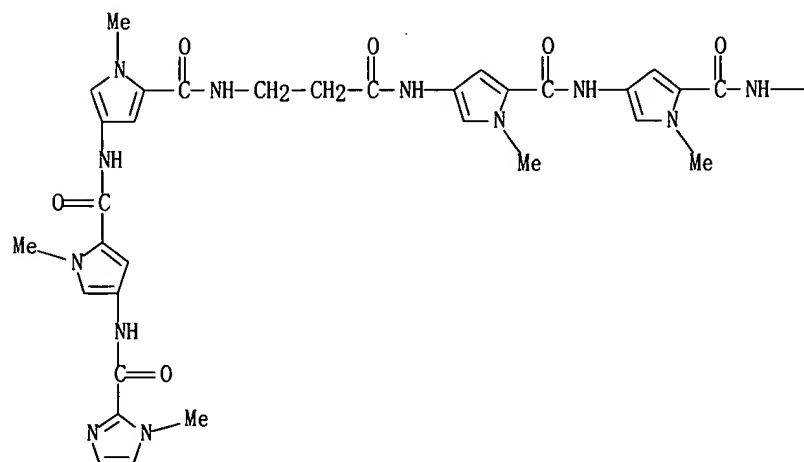
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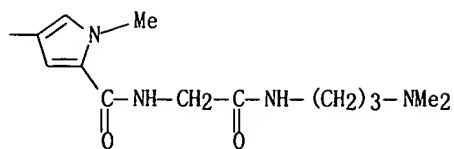
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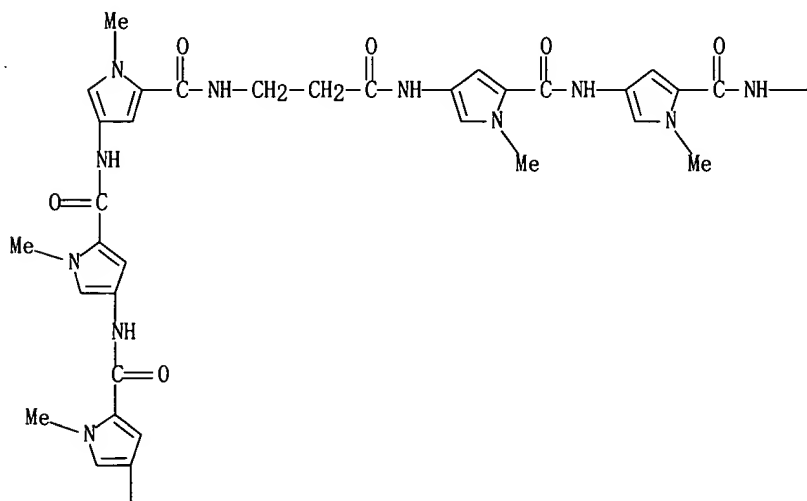
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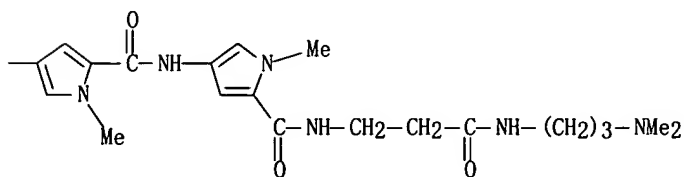
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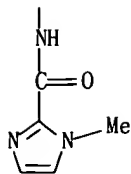
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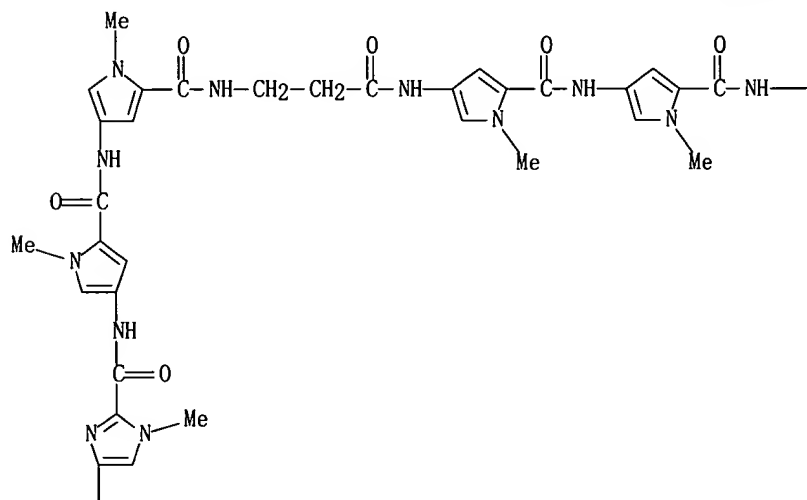
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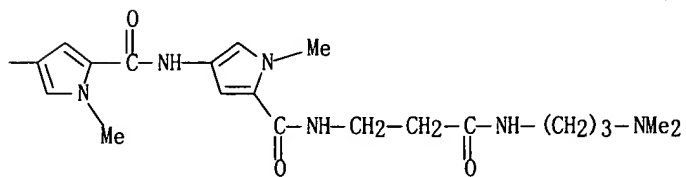
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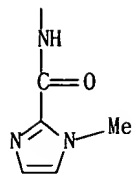
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PAGE 1-B



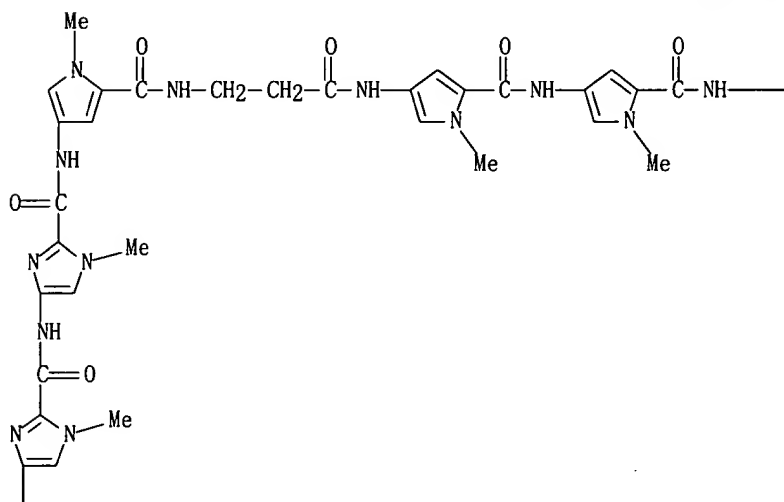
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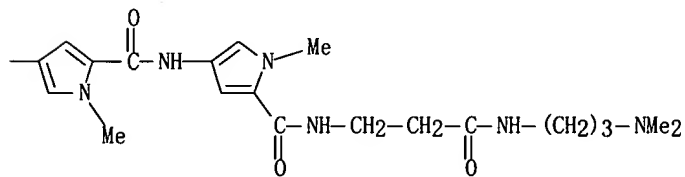
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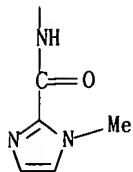
PAGE 1-A



PAGE 1-B



PAGE 2-A



IT 180076-91-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)

(preparation and sequence specificity of DNA-binding pyrrole and imidazole  
polyamide derivs.)

RN 180076-91-9 HCAPLUS

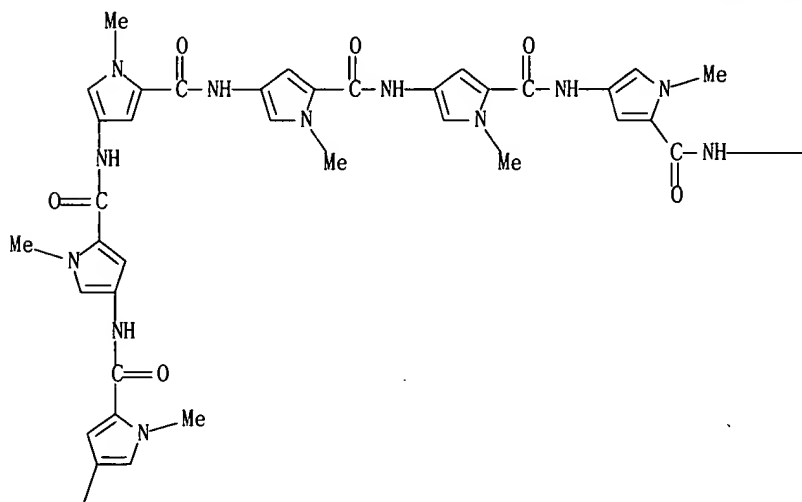
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CRN 107561-33-1

CMF C41 H50 N14 O6

PAGE 1-A



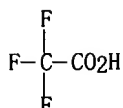
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PAGE 2-A

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CM 2

CRN 76-05-1  
CMF C2 H F3 02

L42 ANSWER 10 OF 17 HCAPLUS COPYRIGHT 2005 ACS on STN  
AN 1998:682381 HCAPLUS  
DN 129:290444  
ED Entered STN: 28 Oct 1998  
TI Stereochemical control of the DNA binding affinity, sequence specificity,  
and orientation-preference of chiral hairpin polyamides in the minor  
groove  
IN Baird, Eldon E.; Dervan, Peter B.  
PA California Institute of Technology, USA  
SO PCT Int. Appl., 80 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
IC ICM C07D403-14  
ICS C07D207-34; A61K031-415; C12Q001-68  
CC 34-3 (Amino Acids, Peptides, and Proteins)  
Section cross-reference(s): 1, 3, 28  
FAN.CNT 11

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Search done by Noble Jarrell

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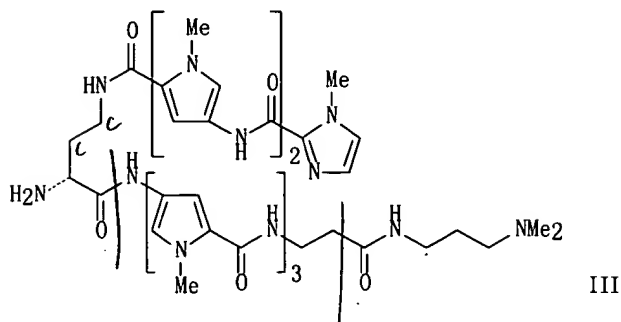
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GI

X1X2X3X4X5X6?X7X8X9X10X11X12 I

X1X2X3X4X5X6 X1X2X3X4X5X6  
X12X11X10X9X8X7? LX12X11X10X9X8X7? P II



AB This invention provides improved polyamides I and II [X1/X12, X2/X11, X3/X10, X4/X9, X5/X8, X6/X7 = carboxamide binding pairs which bind DNA base pairs wherein at least one binding pair is Hp/Py or Py/Hp and the other is selected from the group Py/Im, Im/Py, Py/Py; X1/X12, X2/X11, and X3/X10 may be absent; .gamma. = .gamma.-aminobutyric acid, (R)-2,4-diaminobutyric acid; L = .beta.-alanine, 5-aminovaleric acid; P = 0-10 polyamides I; Im = N-methylimidazole; Py = N-methylpyrrole; Hp = 3-hydroxy-N-methylpyrrole] comprising a hairpin loop derived from .gamma.-aminobutyric acid which bind to the minor groove of a promoter regions of a DNA sequence. Binding of the polyamide to the DNA sequence of the promoter region inhibits expression of the requisite gene. The improvement relates to the use of R-2,4-diaminobutyric acid and derivs. of the 2-amino group to form the hairpin loop. The improved asym. hairpin provides for tighter binding of the polyamides to the minor groove of DNA and addnl. provides an amine function for derivatizing polyamides by, for example, forming amide linkages. Such derivs. may serve to attach detectable labels to the polyamide. Thus, hairpin polyamide III was prepared by machine-assisted solid-phase methods on a PAM resin. Hairpin III was specific for binding the DNA sequence 5'-TGTTA-3' as shown by DNase I footprint studies and NMR studies.

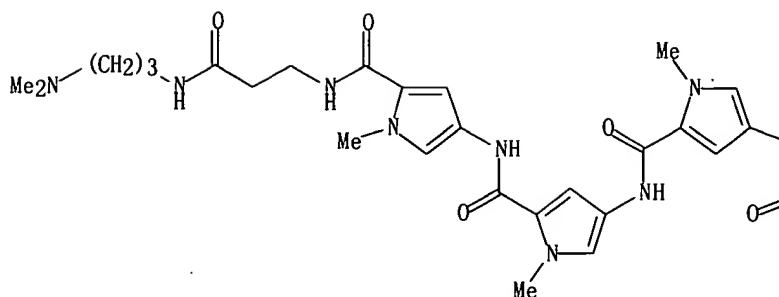
- ST DNA binding affinity diaminobutyric acid polyamide; chiral hairpin polyamide prepn DNA specificity; minor groove orientation chiral hairpin polyamide
- IT Gene  
(regulation; stereochem. control of DNA binding affinity, sequence specificity, and minor groove orientation preference of chiral hairpin polyamides)
- IT DNA sequences  
(stereochem. control of DNA binding affinity, sequence specificity, and minor groove orientation preference of chiral hairpin polyamides)
- IT DNA  
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
(stereochem. control of DNA binding affinity, sequence specificity, and minor groove orientation preference of chiral hairpin polyamides)
- IT 26908-94-1DP, chiral hairpin polyamides containing 204921-44-8P 204921-51-7P  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT



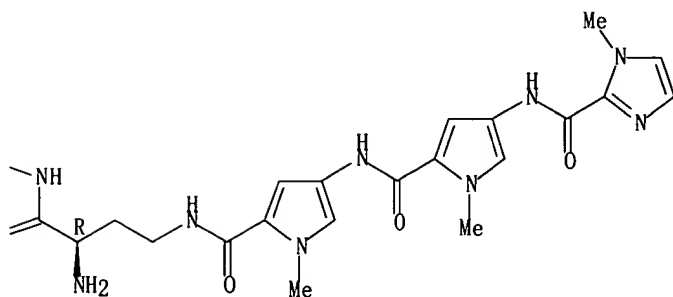
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 214196-54-OP 214196-57-3P 214196-59-5P  
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 study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);  
 BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (stereochem. control of DNA binding affinity, sequence specificity, and  
 minor groove orientation preference of chiral hairpin polyamides)
- IT 9003-98-9, DNase I  
 RL: CAT (Catalyst use); USES (Uses).  
 (stereochem. control of DNA binding affinity, sequence specificity, and  
 minor groove orientation preference of chiral hairpin polyamides)
- IT 214196-61-9P  
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
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- IT 105-83-9 109-55-7, 3-(Dimethylamino)propylamine 10045-89-3, Ferrous  
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 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (stereochem. control of DNA binding affinity, sequence specificity, and  
 minor groove orientation preference of chiral hairpin polyamides)
- IT 204921-49-3P 204921-50-6P 214196-25-5P 214196-34-6P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (stereochem. control of DNA binding affinity, sequence specificity, and  
 minor groove orientation preference of chiral hairpin polyamides)
- IT 214195-94-5P 214196-00-6P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (stereochem. control of DNA binding affinity, sequence specificity, and  
 minor groove orientation preference of chiral hairpin polyamides)
- RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
- RE  
 (1) Herman, D; JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 1998, V120(7), P1382  
 HCAPLUS  
 (2) Swalley, S; JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 1996, V118(35), P8198  
 HCAPLUS
- IT 204921-44-8P 204921-51-7P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological  
 study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU  
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT  
 (Reactant or reagent); USES (Uses)  
 (stereochem. control of DNA binding affinity, sequence specificity, and  
 minor groove orientation preference of chiral hairpin polyamides)
- RN 204921-44-8 HCAPLUS
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Absolute stereochemistry. Rotation (+).

PAGE 1-A



PAGE 1-B

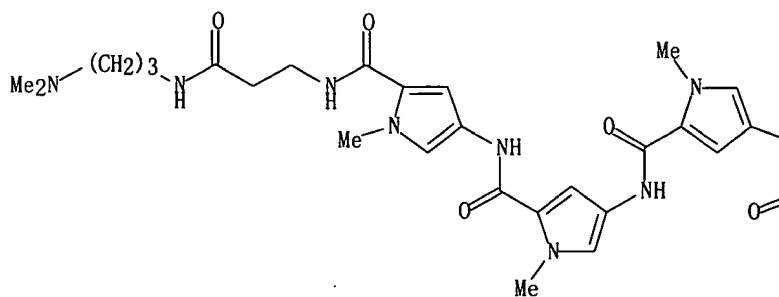


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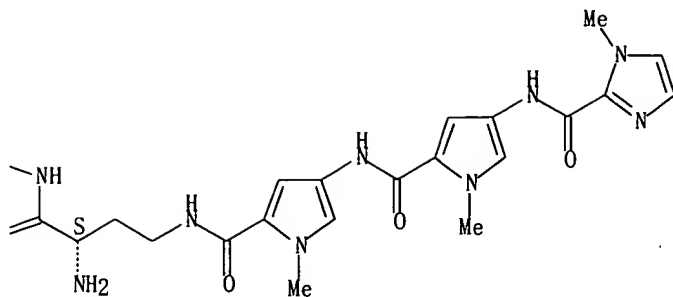
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Absolute stereochemistry. Rotation (-).

PAGE 1-A



PAGE 1-B



IT 204921-46-OP 204921-47-1P 204921-52-8P  
204921-54-OP

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

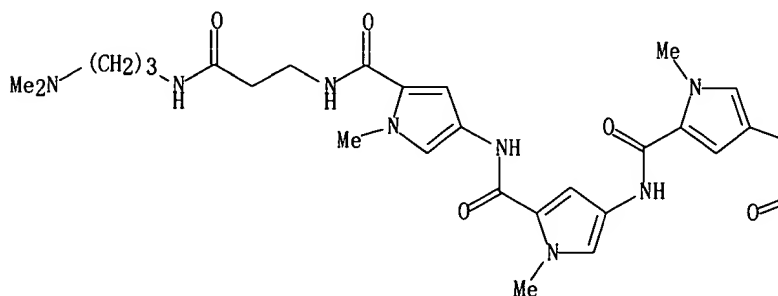
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RN 204921-46-0 HCAPLUS

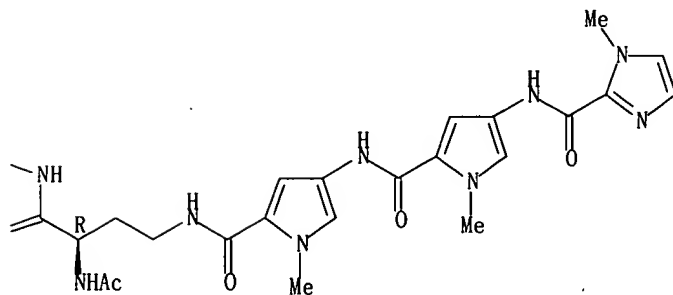
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Absolute stereochemistry. Rotation (+).

PAGE 1-A



PAGE 1-B

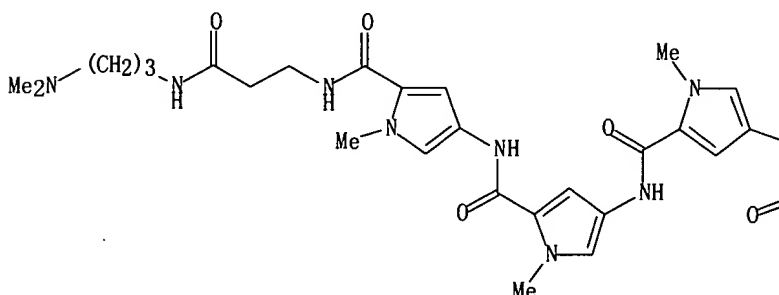


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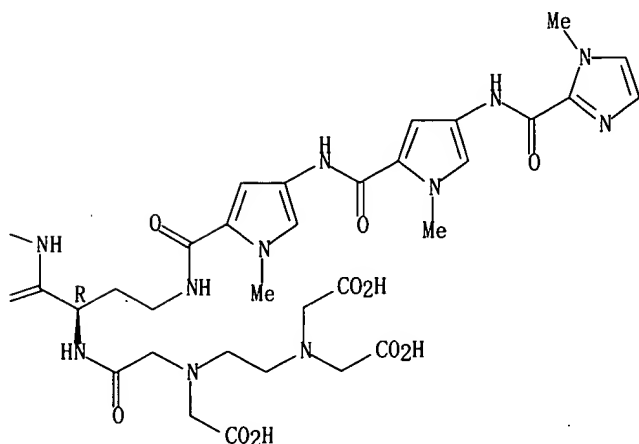
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Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

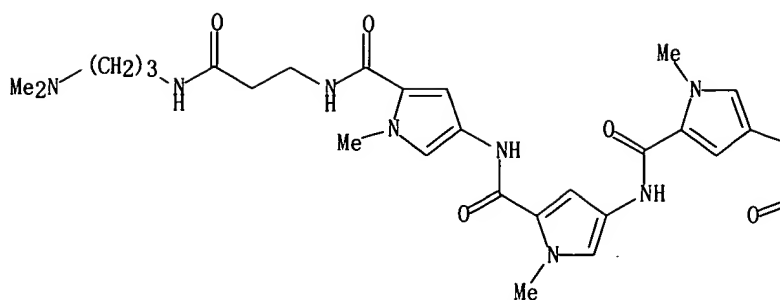


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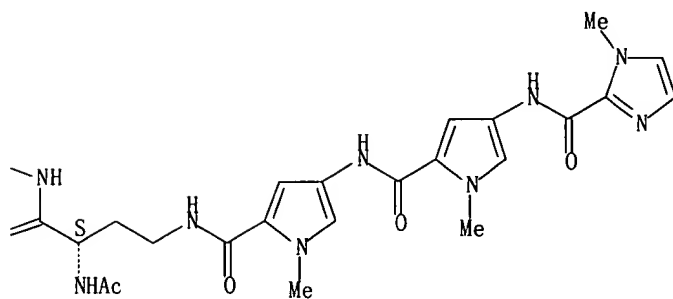
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Absolute stereochemistry. Rotation (-).

PAGE 1-A



PAGE 1-B

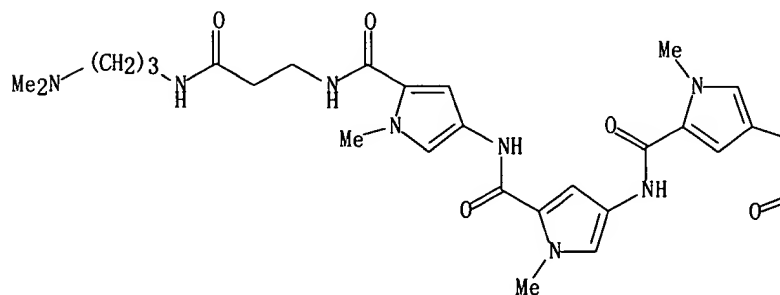


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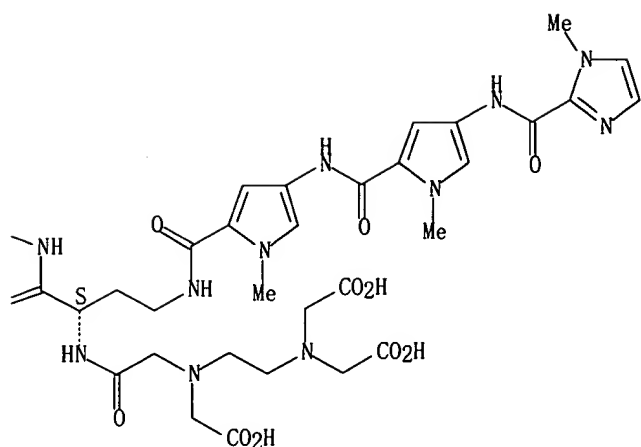
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Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



IT 204921-49-3P 204921-50-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

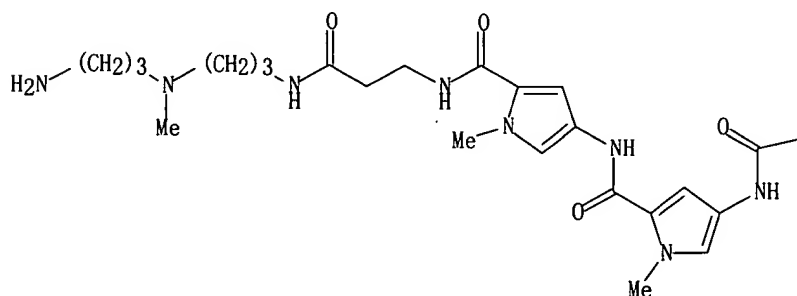
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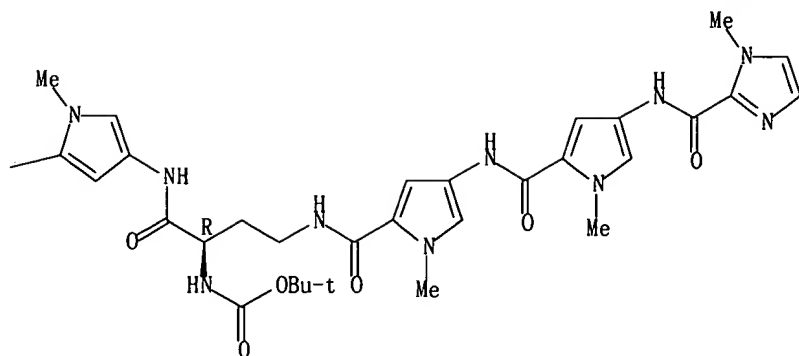
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Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

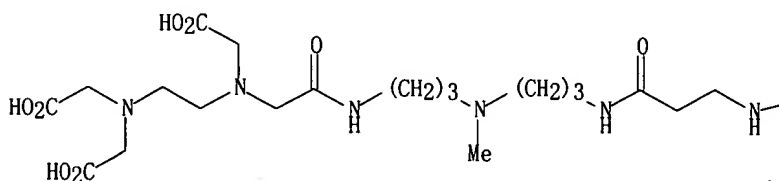


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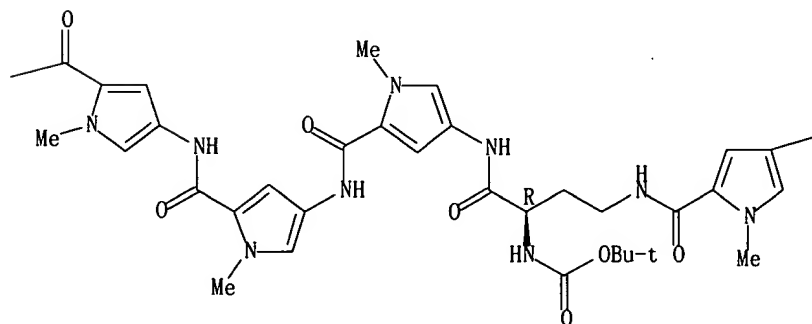
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(CA INDEX NAME)

Absolute stereochemistry.

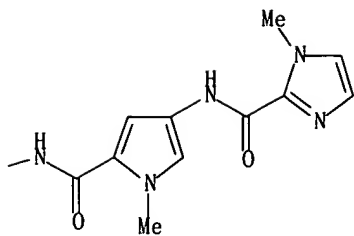
PAGE 1-A



PAGE 1-B



PAGE 1-C



L42 ANSWER 11 OF 17 HCAPLUS COPYRIGHT 2005 ACS on STN  
 AN 1998:604905 HCAPLUS  
 DN 129:226610  
 ED Entered STN: 24 Sep 1998  
 TI Design and use of specific polyamide DNA-binding ligands for modulation of gene expression  
 IN Baird, Eldon E.; Dervan, Peter B.  
 PA California Institute of Technology, USA  
 SO PCT Int. Appl., 260 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 IC ICM C07D207-34  
 ICS C07D233-90; A61K031-415; C07D403-14; C12Q001-68  
 CC 3-1 (Biochemical Genetics)

FAN. CNT 11

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US 6143901	A	20001107	US 1997-837524	19970421 <--
US 6635417	B1	20031021	US 1997-853522	19970508 <--
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AU 9862552	A1	19980909	AU 1998-62552	19980129 <--
EP 973740	A1	20000126	EP 1998-904755	19980129 <--
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US 1997-38384P	P	19970214 <--		



WO 1997-US3332 A2 19970220 <--  
 WO 1997-US12722 A 19970721 <--  
 WO 1998-US1714 W 19980129 <--

## CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
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AB The invention encompasses improved selective polyamides for binding to specific nucleotide sequences of double stranded DNA as well as methods for designing and synthesizing polyamide DNA binding ligands that are selective for an identified specific nucleotide sequence. The 3-hydroxy-N-methylpyrrole/N-methylpyrrole carboxamide pair specifically recognizes the T.A base pair, while the N-methylpyrrole/3-hydroxy-N-methylpyrrole pair recognizes A.T nucleotide pairs. Similarly, an N-methylimidazole/N-methylpyrrole carboxamide pair specifically recognizes the G.C nucleotide pair, and the N-methylpyrrole/N-methylimidazole carboxamide pair recognizes the C.G nucleotide pair.

ST polyamide pyrrole imidazole contg DNA binding

IT Polyamides, biological studies

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(design and use of specific polyamide DNA-binding ligands for modulation of gene expression)

IT DNA

Gene

Promoter (genetic element)

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(design and use of specific polyamide DNA-binding ligands for modulation of gene expression)

IT Gene

(expression, modulation of; design and use of specific polyamide DNA-binding ligands for modulation of gene expression)

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RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(design and use of specific polyamide DNA-binding ligands for modulation of gene expression)

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RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(design and use of specific polyamide DNA-binding ligands for modulation of gene expression)

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(design and use of specific polyamide DNA-binding ligands for modulation of gene expression)

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	212437-60-0	212437-61-1	212437-62-2	212437-63-3	212437-64-4
	212437-65-5	212437-66-6	212437-67-7	212437-68-8	212437-69-9
	212437-70-2	212437-71-3	212437-72-4	212437-73-5	212437-74-6
	212437-75-7	212437-76-8	212437-77-9	212437-78-0	212437-79-1
	212437-80-4	212437-81-5	212437-82-6	212437-83-7	212437-84-8
	212437-85-9	212437-86-0	212437-87-1	212437-88-2	212437-89-3
	212437-90-6	212437-91-7	212437-92-8	212437-93-9	212437-94-0
	212437-95-1	212437-96-2	212437-97-3	212437-98-4	212437-99-5
	212438-00-1	212438-01-2	212438-02-3	212438-03-4	212438-04-5
	212438-05-6	212438-06-7	212438-07-8	212438-08-9	212438-09-0
	212438-10-3	212438-11-4	212438-12-5	212438-13-6	212438-14-7
	212438-15-8	212438-16-9	212438-17-0	212438-18-1	212438-19-2
	212438-20-5	212438-21-6	212438-22-7	212438-23-8	212438-24-9
	212438-25-0	212438-26-1	212438-27-2	212438-28-3	212438-29-4
	212438-30-7	212438-31-8	212438-32-9	212438-33-0	212438-34-1
	212438-35-2	212438-36-3	212438-37-4	212438-38-5	212438-39-6
	212438-40-9	212438-41-0	212438-42-1	212438-43-2	212438-44-3
	212438-45-4	212438-46-5	212438-47-6	212438-48-7	212438-49-8
	212438-50-1	212438-51-2	212438-52-3	212438-53-4	212438-54-5
	212438-55-6	212438-56-7	212438-57-8	212438-58-9	212438-59-0
	212438-60-3	212438-61-4	212438-62-5	212438-63-6	212438-64-7
	212438-65-8	212438-66-9	212438-67-0	212438-68-1	212438-69-2
	212438-70-5	212438-71-6	212438-72-7	212438-73-8	212438-74-9
	212438-75-0	212438-76-1	212438-77-2	212438-78-3	212438-79-4
	212438-80-7	212438-81-8	212438-82-9	212438-83-0	212438-84-1
	212438-85-2	212438-86-3	212438-87-4	212438-88-5	212438-89-6
	212438-90-9	212438-91-0	212438-92-1	212438-93-2	212438-94-3
	212438-95-4	212438-96-5	212438-97-6	212438-98-7	212438-99-8
	212439-00-4	212439-01-5	212439-02-6	212439-03-7	212439-04-8
	212439-05-9	212439-06-0	212439-07-1	212439-08-2	212439-09-3
	212439-10-6	212439-11-7	212439-12-8	212439-13-9	212439-14-0
	212439-15-1	212439-16-2	212439-17-3	212439-18-4	212439-19-5
	212439-20-8	212439-21-9	212439-22-0	212439-23-1	212439-24-2
	212439-25-3	212439-26-4	212439-27-5	212439-28-6	212439-29-7
	212439-30-0	212439-31-1	212439-32-2	212439-33-3	212439-34-4
	212439-35-5	212439-36-6	212439-37-7	212439-38-8	212439-39-9

212439-40-2	212439-41-3	212439-42-4	212439-43-5	212439-44-6
212439-45-7	212439-46-8	212439-47-9	212439-48-0	212439-49-1
212439-50-4	212439-51-5	212439-52-6	212439-53-7	212439-54-8
212439-55-9	212439-56-0	212439-57-1	212439-58-2	212439-59-3
212439-60-6	212439-61-7	212439-62-8		

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(design and use of specific polyamide DNA-binding ligands for modulation of gene expression)

IT	212439-63-9	212439-64-0	212439-65-1	212439-66-2	212439-67-3
	212439-68-4	212439-69-5	212439-70-8	212439-71-9	212439-72-0
	212439-73-1	212439-74-2	212439-75-3	212439-76-4	212439-77-5
	212439-78-6	212439-79-7	212439-80-0	212439-81-1	212439-82-2
	212439-83-3	212439-84-4	212439-85-5	212439-86-6	212439-87-7
	212439-88-8	212439-89-9	212439-90-2	212439-91-3	212439-92-4
	212439-93-5	212439-94-6	212439-95-7	212439-96-8	212439-97-9
	212439-98-0	212439-99-1	212440-00-1	212440-01-2	212440-02-3
	212440-03-4	212440-04-5	212440-05-6	212440-06-7	212440-07-8
	212440-08-9	212440-09-0	212440-10-3	212440-11-4	212440-12-5
	212440-13-6	212440-14-7	212440-15-8	212440-16-9	212440-17-0
	212440-18-1	212440-19-2	212440-20-5	212440-21-6	212440-22-7
	212440-23-8	212440-24-9	212440-25-0	212440-26-1	212440-27-2
	212440-28-3	212440-29-4	212440-30-7	212440-31-8	212440-32-9
	212440-33-0	212440-34-1	212440-35-2	212440-36-3	212440-37-4
	212440-38-5	212440-39-6	212440-40-9	212440-41-0	212440-42-1
	212440-43-2	212440-44-3	212440-45-4	212440-46-5	212440-47-6
	212440-48-7	212440-49-8	212440-50-1	212440-51-2	212440-52-3
	212440-53-4	212440-54-5	212440-55-6	212440-56-7	212440-57-8
	212440-58-9	212440-59-0	212440-60-3	212440-61-4	212440-62-5
	212440-63-6	212440-64-7	212440-65-8	212440-66-9	212440-67-0
	212440-68-1	212440-69-2	212440-70-5	212440-71-6	212440-72-7
	212440-73-8	212440-74-9	212440-75-0	212440-76-1	212440-77-2
	212440-78-3	212440-79-4	212440-80-7	212440-81-8	212440-82-9
	212440-83-0	212440-84-1	212440-85-2	212440-86-3	212440-87-4
	212440-88-5	212440-89-6	212440-90-9	212440-91-0	212440-92-1
	212440-93-2	212440-94-3	212440-95-4	212440-96-5	212440-97-6
	212440-98-7	212440-99-8	212441-00-4	212441-01-5	212441-02-6
	212441-03-7	212441-04-8	212441-05-9	212441-06-0	212441-07-1
	212441-08-2	212441-09-3	212441-10-6	212441-11-7	212441-12-8
	212441-13-9	212441-14-0	212441-15-1	212441-16-2	212441-17-3
	212441-18-4	212441-19-5	212441-20-8	212441-21-9	212441-22-0
	212441-23-1	212441-24-2	212441-25-3	212441-26-4	212441-27-5
	212441-28-6	212441-29-7	212441-30-0	212441-31-1	212441-32-2
	212441-33-3	212441-34-4	212441-35-5	212441-36-6	212441-37-7
	212441-38-8	212441-39-9	212441-40-2	212441-41-3	212441-42-4
	212441-43-5	212441-44-6	212441-45-7	212441-46-8	212441-47-9
	212441-48-0	212441-49-1	212441-50-4	212441-51-5	212441-52-6
	212441-53-7	212441-54-8	212441-55-9	212441-56-0	212441-57-1
	212441-58-2	212441-59-3	212441-60-6	212441-61-7	212441-62-8
	212441-63-9	212441-64-0	212441-65-1	212441-66-2	212441-67-3
	212441-68-4	212441-69-5	212441-70-8	212441-71-9	212441-72-0
	212441-73-1	212441-74-2	212441-75-3	212441-76-4	212441-77-5
	212441-78-6	212441-79-7	212441-80-0	212441-81-1	212441-82-2
	212441-83-3	212441-84-4	212441-85-5	212441-86-6	212441-87-7
	212441-88-8	212441-89-9	212441-90-2	212441-91-3	212441-92-4
	212441-93-5	212441-94-6	212441-95-7		

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(design and use of specific polyamide DNA-binding ligands for

## modulation of gene expression)

IT	212441-96-8	212441-97-9	212441-98-0	212441-99-1	212442-00-7
	212442-01-8	212442-02-9	212442-03-0	212442-04-1	212442-05-2
	212442-06-3	212442-07-4	212442-08-5	212442-09-6	212442-10-9
	212442-11-0	212442-12-1	212442-13-2	212442-14-3	212442-15-4
	212442-16-5	212442-17-6	212442-18-7	212442-19-8	212442-20-1
	212442-21-2	212442-22-3	212442-23-4	212442-24-5	212442-25-6
	212442-26-7	212442-27-8	212442-28-9	212442-29-0	212442-30-3
	212442-31-4	212442-32-5	212442-33-6	212442-34-7	212442-35-8
	212442-36-9	212442-37-0	212442-38-1	212442-39-2	212442-40-5
	212442-41-6	212442-42-7	212442-43-8	212442-44-9	212442-45-0
	212442-46-1	212442-47-2	212442-48-3	212442-49-4	212442-50-7
	212442-51-8	212442-52-9	212442-53-0	212442-54-1	212442-55-2
	212442-56-3	212442-57-4	212442-58-5	212442-59-6	212442-60-9
	212442-61-0	212442-62-1	212442-63-2	212442-64-3	212442-65-4
	212442-66-5	212442-67-6	212442-68-7	212442-69-8	212442-70-1
	212442-71-2	212442-72-3	212442-73-4	212442-74-5	212442-75-6
	212442-76-7	212442-77-8	212442-78-9	212442-79-0	212442-80-3
	212442-81-4	212442-82-5	212442-83-6	212442-84-7	212442-85-8
	212442-86-9	212442-87-0	212442-88-1	212442-89-2	212442-90-5
	212442-91-6	212442-92-7	212442-93-8	212442-94-9	212442-95-0
	212442-96-1	212442-97-2	212442-98-3	212442-99-4	212443-00-0
	212443-01-1	212443-02-2	212443-03-3	212443-04-4	212443-05-5
	212443-06-6	212443-07-7	212443-08-8	212443-09-9	212443-10-2
	212443-11-3	212443-12-4	212443-13-5	212443-14-6	212443-15-7
	212443-16-8	212443-17-9	212443-18-0	212443-19-1	212443-20-4
	212443-21-5	212443-22-6	212443-23-7	212443-24-8	212443-25-9
	212443-26-0	212443-27-1	212443-28-2	212443-29-3	212443-30-6
	212443-31-7	212443-32-8	212443-33-9	212443-34-0	212443-35-1
	212443-36-2	212443-37-3	212443-38-4	212443-39-5	212443-40-8
	212443-41-9	212443-42-0	212443-43-1	212443-44-2	212443-45-3
	212443-46-4	212443-47-5	212443-48-6	212443-49-7	212443-50-0
	212443-51-1	212443-52-2	212443-53-3	212443-54-4	212443-55-5
	212443-56-6	212443-57-7	212443-58-8	212443-59-9	212443-60-2
	212443-61-3	212443-62-4	212443-63-5	212443-64-6	212443-65-7
	212443-66-8	212443-67-9	212443-68-0	212443-69-1	212443-70-4
	212443-71-5	212443-72-6	212443-73-7	212443-74-8	212443-75-9
	212443-76-0	212443-77-1	212443-78-2	212443-79-3	212443-80-6
	212443-81-7	212443-82-8	212443-83-9	212443-84-0	212443-85-1
	212443-86-2	212443-87-3	212443-88-4	212443-89-5	212443-90-8
	212443-91-9	212443-92-0	212443-93-1	212443-94-2	212443-95-3
	212443-96-4	212443-97-5	212443-98-6	212443-99-7	212444-00-3
	212444-01-4	212444-02-5	212444-03-6	212444-04-7	212444-05-8
	212444-06-9	212444-07-0	212444-08-1	212444-09-2	212444-10-5
	212444-11-6	212444-12-7	212444-13-8	212444-14-9	212444-15-0
	212444-16-1	212444-17-2	212444-18-3	212444-19-4	212444-20-7
	212444-21-8	212444-22-9	212444-23-0	212444-24-1	212444-25-2
	212444-26-3	212444-27-4	212444-28-5		

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(design and use of specific polyamide DNA-binding ligands for modulation of gene expression)

IT	212444-29-6	212444-30-9	212444-31-0	212444-32-1	212444-33-2
	212444-34-3	212444-35-4	212444-36-5	212444-37-6	212444-38-7
	212444-39-8	212444-40-1	212444-41-2	212444-42-3	212444-43-4
	212444-44-5	212444-45-6	212444-46-7	212444-47-8	212444-48-9
	212444-49-0	212444-50-3	212444-51-4	212444-52-5	212444-53-6
	212444-54-7	212444-55-8	212444-56-9	212444-57-0	212444-58-1
	212444-59-2	212444-60-5	212444-61-6	212444-62-7	212444-63-8
	212444-64-9	212444-65-0	212444-66-1	212444-67-2	212444-68-3

212444-69-4	212444-70-7	212444-71-8	212444-72-9	212444-73-0
212444-74-1	212444-75-2	212444-76-3	212444-77-4	212444-78-5
212444-79-6	212444-80-9	212444-81-0	212444-82-1	212444-83-2
212444-84-3	212444-85-4	212444-86-5	212444-87-6	212444-88-7
212444-89-8	212444-90-1	212444-91-2	212444-92-3	212444-93-4
212444-94-5	212444-95-6	212444-96-7	212444-97-8	212444-98-9
212444-99-0	212445-00-6	212445-01-7	212445-02-8	212445-03-9
212445-04-0	212445-05-1	212445-07-3	212445-08-4	212445-09-5
212445-10-8	212445-11-9	212445-12-0	212445-13-1	212445-14-2
212445-15-3	212445-16-4	212445-17-5	212445-18-6	212445-19-7
212445-20-0	212445-21-1	212445-22-2	212445-23-3	212445-24-4
212445-25-5	212445-26-6	212445-28-8	212445-29-9	212445-30-2
212445-31-3	212445-32-4	212445-33-5	212445-34-6	212445-35-7
212445-36-8	212445-37-9	212445-38-0	212445-39-1	212445-40-4
212445-41-5	212445-42-6	212445-43-7	212445-44-8	212445-45-9
212445-46-0	212445-47-1	212445-48-2	212445-49-3	212445-50-6
212445-51-7	212445-52-8	212445-53-9	212445-54-0	212445-55-1
212445-56-2	212445-57-3	212445-58-4	212445-59-5	212445-60-8
212445-61-9	212445-62-0	212445-63-1	212445-64-2	212445-65-3
212445-66-4	212445-67-5	212445-68-6	212445-69-7	212445-70-0
212445-71-1	212445-72-2	212445-73-3	212445-74-4	212445-75-5
212445-76-6	212445-77-7	212445-78-8	212445-79-9	212445-80-2
212445-81-3	212445-82-4	212445-83-5	212445-84-6	212445-85-7
212445-86-8	212445-87-9	212445-88-0	212445-89-1	212445-90-4
212445-91-5	212445-92-6	212445-93-7	212445-94-8	212445-95-9
212445-96-0	212445-97-1	212445-98-2	212445-99-3	212446-00-9
212446-01-0	212446-02-1	212446-03-2	212446-04-3	212446-05-4
212446-06-5	212446-07-6	212446-08-7	212446-09-8	212446-10-1
212446-11-2	212446-12-3	212446-13-4	212446-14-5	212446-16-7
212446-17-8	212446-18-9	212446-19-0	212446-20-3	212446-21-4
212446-22-5	212446-23-6	212446-24-7	212446-25-8	212446-26-9
212446-27-0	212446-28-1	212446-29-2	212446-30-5	212446-31-6
212446-32-7	212446-33-8	212446-34-9	212446-35-0	212446-36-1
212446-37-2	212446-38-3	212446-39-4	212446-40-7	212446-41-8
212446-42-9	212446-43-0	212446-44-1	212446-45-2	212446-46-3
212446-47-4	212446-48-5	212446-49-6	212446-50-9	212446-51-0
212446-52-1	212446-53-2	212446-54-3	212446-55-4	212446-56-5
212446-57-6	212446-58-7	212446-59-8	212446-60-1	212446-61-2
212446-62-3	212446-63-4	212446-64-5		

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(design and use of specific polyamide DNA-binding ligands for modulation of gene expression)

IT	212446-65-6	212446-66-7	212446-67-8	212446-68-9	212446-69-0
	212446-70-3	212446-71-4	212446-72-5	212446-73-6	212446-74-7
	212446-75-8	212446-76-9	212446-77-0	212446-78-1	212446-79-2
	212446-80-5	212446-81-6	212446-82-7	212446-83-8	212446-84-9
	212446-85-0	212446-86-1	212446-87-2	212446-88-3	212446-89-4
	212446-90-7	212446-91-8	212446-92-9	212446-93-0	212446-94-1
	212446-95-2	212446-96-3	212446-97-4	212446-98-5	212446-99-6
	212447-00-2	212447-01-3	212447-02-4	212447-03-5	212447-04-6
	212447-05-7	212447-06-8	212447-07-9	212447-08-0	212447-09-1
	212447-10-4	212447-11-5	212447-12-6	212447-13-7	212447-14-8
	212447-15-9	212447-16-0	212447-17-1	212447-18-2	212447-19-3
	212447-20-6	212447-21-7	212447-22-8	212447-23-9	212447-24-0
	212447-25-1	212447-26-2	212447-27-3	212447-28-4	212447-29-5
	212447-30-8	212447-31-9	212447-32-0	212447-33-1	212447-34-2
	212447-35-3	212447-36-4	212447-37-5	212447-38-6	212447-39-7
	212447-40-0	212447-41-1	212447-42-2	212447-43-3	212447-44-4
	212447-45-5	212447-46-6	212447-47-7	212447-48-8	212447-49-9

212447-50-2	212447-51-3	212447-53-5	212447-54-6	212447-55-7
212447-56-8	212447-57-9	212447-58-0	212447-59-1	212447-60-4
212447-61-5	212447-62-6	212447-63-7	212447-64-8	212447-65-9
212447-66-0	212447-67-1	212447-68-2	212447-69-3	212447-70-6
212447-71-7	212447-72-8	212447-73-9	212447-74-0	212447-76-2
212447-79-5	212447-80-8	212447-81-9	212447-82-0	212447-83-1
212447-84-2	212447-85-3	212447-86-4	212447-87-5	212447-88-6
212447-89-7	212447-90-0	212447-91-1	212447-92-2	212447-93-3
212447-94-4	212447-95-5	212447-96-6	212447-97-7	212447-98-8
212447-99-9	212448-00-5	212448-01-6	212448-02-7	212448-03-8
212448-04-9	212448-05-0	212448-06-1	212448-07-2	212448-08-3
212448-09-4	212448-10-7	212448-11-8	212448-12-9	212448-13-0
212448-14-1	212448-15-2	212448-16-3	212448-17-4	212448-18-5
212448-19-6	212448-20-9	212448-21-0	212448-22-1	212448-23-2
212448-24-3	212448-25-4	212448-26-5	212448-27-6	212448-28-7
212448-29-8	212448-30-1	212448-31-2	212448-32-3	212448-33-4
212448-34-5	212448-35-6	212448-36-7	212448-37-8	212448-38-9
212448-39-0	212448-40-3	212448-41-4	212448-42-5	212448-43-6
212448-44-7	212448-45-8	212448-46-9	212448-47-0	212448-48-1
212448-49-2	212448-50-5	212448-51-6	212448-52-7	212448-53-8
212448-54-9	212448-55-0	212448-56-1	212448-57-2	212448-58-3
212448-59-4	212448-60-7	212448-61-8	212448-62-9	212448-63-0
212448-64-1	212448-65-2	212448-66-3	212448-67-4	212448-68-5
212448-69-6	212448-70-9	212448-71-0	212448-72-1	212448-73-2
212448-74-3	212448-75-4	212448-77-6	212448-78-7	212448-79-8
212448-80-1	212448-81-2	212448-82-3	212448-83-4	212448-84-5
212448-85-6	212448-86-7	212448-87-8	212448-88-9	212448-89-0
212448-90-3	212448-91-4	212448-92-5	212448-93-6	212448-94-7
212448-95-8	212448-96-9	212448-97-0	212448-98-1	212448-99-2
212449-00-8	212449-01-9	212449-02-0		

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use);

BIOL (Biological study); PROC (Process); USES (Uses)

(design and use of specific polyamide DNA-binding ligands for modulation of gene expression)

IT	212449-03-1	212449-04-2	212449-05-3	212449-06-4	212449-07-5
	212449-08-6	212449-09-7	212449-10-0	212449-11-1	212449-12-2
	212449-13-3	212449-14-4	212449-15-5	212449-16-6	212449-17-7
	212449-18-8	212449-19-9	212449-20-2	212449-21-3	212449-22-4
	212449-23-5	212449-24-6	212449-25-7	212449-26-8	212449-27-9
	212449-28-0	212449-29-1	212449-30-4	212449-31-5	212449-32-6
	212449-33-7	212449-34-8	212449-35-9	212449-36-0	212449-37-1
	212449-38-2	212449-39-3	212449-40-6	212449-41-7	212449-43-9
	212449-44-0	212449-45-1	212449-46-2	212449-47-3	212449-48-4
	212449-49-5	212449-50-8	212449-51-9	212449-52-0	212449-53-1
	212449-54-2	212449-55-3	212449-56-4	212449-57-5	212449-58-6
	212449-59-7	212449-60-0	212449-61-1	212449-62-2	212449-63-3
	212449-64-4	212449-65-5	212449-66-6	212449-67-7	212449-68-8
	212449-69-9	212449-70-2	212449-71-3	212449-72-4	212449-73-5
	212449-74-6	212449-75-7	212449-76-8	212449-77-9	212449-78-0
	212449-79-1	212449-80-4	212449-81-5	212449-82-6	212449-83-7
	212449-84-8	212449-85-9	212449-86-0	212449-87-1	212449-88-2
	212449-89-3	212449-90-6	212449-91-7	212449-92-8	212449-93-9
	212449-94-0	212449-95-1	212449-96-2	212449-97-3	212449-98-4
	212449-99-5	212450-00-5	212450-01-6	212450-02-7	212450-03-8
	212450-04-9	212450-05-0	212450-06-1	212450-07-2	212450-08-3
	212450-09-4	212450-10-7	212450-11-8	212450-12-9	212450-13-0
	212450-14-1	212450-15-2	212450-16-3	212450-17-4	212450-18-5
	212450-19-6	212450-20-9	212450-21-0	212450-22-1	212450-23-2
	212450-24-3	212450-25-4	212450-26-5	212450-27-6	212450-28-7
	212450-29-8	212450-30-1	212450-31-2	212450-32-3	212450-33-4



212450-34-5	212450-35-6	212450-36-7	212450-37-8	212450-38-9
212450-39-0	212450-40-3	212450-41-4	212450-42-5	212450-43-6
212450-44-7	212450-45-8	212450-46-9	212450-47-0	212450-48-1
212450-49-2	212450-50-5	212450-51-6	212450-52-7	212450-53-8
212450-54-9	212450-55-0	212450-56-1	212450-57-2	212450-58-3
212450-59-4	212450-60-7	212450-61-8	212450-62-9	212450-63-0
212450-64-1	212450-65-2	212450-66-3	212450-67-4	212450-68-5
212450-69-6	212450-70-9	212450-71-0	212450-72-1	212450-73-2
212450-74-3	212450-75-4	212450-76-5	212450-77-6	212450-78-7
212450-79-8	212450-80-1	212450-81-2	212450-82-3	212450-83-4
212450-84-5	212450-85-6	212450-86-7	212450-87-8	212450-88-9
212450-89-0	212450-90-3	212450-91-4	212450-92-5	212450-93-6
212450-94-7	212450-95-8	212450-96-9	212450-97-0	212450-98-1
212450-99-2	212451-00-8	212451-01-9	212451-02-0	212451-03-1
212451-04-2	212451-05-3	212451-06-4	212451-07-5	212451-08-6
212451-09-7	212451-10-0	212451-11-1	212451-12-2	212451-13-3
212451-14-4	212451-15-5	212451-16-6	212451-17-7	212451-18-8
212451-19-9	212451-20-2	212451-21-3	212451-22-4	212451-23-5
212451-24-6	212451-25-7	212451-26-8	212451-27-9	212451-28-0
212451-29-1	212451-30-4	212451-31-5	212451-32-6	212451-33-7
212451-34-8	212451-35-9	212451-36-0		

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(design and use of specific polyamide DNA-binding ligands for modulation of gene expression)

IT	212451-37-1	212451-38-2	212451-39-3	212451-40-6	212451-41-7
	212451-42-8	212451-43-9	212451-44-0	212451-45-1	212451-46-2
	212451-47-3	212451-48-4	212451-49-5	212451-50-8	212451-51-9
	212451-52-0	212451-53-1	212451-54-2	212451-55-3	212451-56-4
	212451-57-5	212451-58-6	212451-59-7	212451-60-0	212451-61-1
	212451-62-2	212451-63-3	212451-64-4	212451-65-5	212451-66-6
	212451-67-7	212451-68-8	212451-69-9	212451-70-2	212451-71-3
	212451-72-4	212451-73-5	212451-74-6	212451-75-7	212451-76-8
	212451-77-9	212451-78-0	212451-82-6	212451-83-7	212451-84-8
	212451-85-9	212451-86-0	212451-87-1	212451-88-2	212451-89-3
	212451-90-6	212451-91-7	212451-92-8	212451-93-9	212451-94-0
	212451-95-1	212451-96-2	212451-97-3	212451-98-4	212451-99-5
	212452-00-1	212452-01-2	212452-02-3	212452-03-4	212452-04-5
	212452-05-6	212452-06-7	212452-08-9	212452-15-8	212452-22-7
	212452-31-8	212452-36-3	212452-39-6	212452-40-9	212452-41-0
	212452-42-1	212452-43-2	212452-44-3	212452-45-4	212452-46-5
	212452-47-6	212452-48-7	212452-49-8	212452-50-1	212452-51-2
	212452-52-3	212452-53-4	212452-54-5	212452-55-6	212452-56-7
	212452-57-8	212452-58-9	212452-59-0	212452-61-4	212452-62-5
	212452-63-6	212452-64-7	212452-65-8	212452-66-9	212452-67-0
	212452-68-1	212452-69-2	212452-70-5	212452-71-6	212452-72-7
	212452-73-8	212452-74-9	212452-75-0	212452-76-1	212452-77-2
	212452-78-3	212452-79-4	212452-80-7	212452-81-8	212452-82-9
	212452-83-0	212452-84-1	212452-85-2	212452-86-3	212452-87-4
	212452-88-5	212452-89-6	212452-90-9	212452-91-0	212452-92-1
	212452-93-2	212452-94-3	212452-95-4	212452-96-5	212452-97-6
	212452-98-7	212452-99-8	212453-00-4	212453-01-5	212453-02-6
	212453-03-7	212453-04-8	212453-05-9	212453-06-0	212453-07-1
	212453-08-2	212453-09-3	212453-10-6	212453-11-7	212453-12-8
	212453-13-9	212453-14-0	212453-15-1	212453-16-2	212453-17-3
	212453-18-4	212453-19-5	212453-20-8	212453-21-9	212453-22-0
	212453-23-1	212453-24-2	212453-25-3	212453-26-4	212453-27-5
	212453-28-6	212453-29-7	212453-30-0	212453-31-1	212453-32-2
	212453-33-3	212453-34-4	212453-35-5	212453-36-6	212453-37-7
	212453-38-8	212453-39-9	212453-40-2	212453-41-3	212453-42-4

212453-43-5	212453-44-6	212453-45-7	212453-46-8	212453-47-9
212453-48-0	212453-49-1	212453-50-4	212453-51-5	212453-52-6
212453-53-7	212453-54-8	212453-55-9	212453-56-0	212453-57-1
212453-58-2	212453-59-3	212453-60-6	212453-61-7	212453-62-8
212453-63-9	212453-64-0	212453-65-1	212453-66-2	212453-67-3
212453-68-4	212453-69-5	212453-70-8	212453-71-9	212453-72-0
212453-73-1	212453-74-2	212453-75-3	212453-76-4	212453-77-5
212453-78-6	212453-79-7	212453-80-0	212453-81-1	212453-82-2
212453-83-3	212453-84-4	212453-85-5	212453-86-6	212453-87-7
212453-88-8	212453-89-9	212453-90-2	212453-91-3	212453-92-4
212453-94-6	212453-95-7	212453-96-8	212453-97-9	212453-98-0
212453-99-1	212454-00-7	212454-01-8		

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(design and use of specific polyamide DNA-binding ligands for modulation of gene expression)

IT	212454-02-9	212454-03-0	212454-04-1	212454-05-2	212454-06-3
	212454-07-4	212454-08-5	212454-09-6	212454-10-9	212454-11-0
	212454-12-1	212454-13-2	212454-14-3	212454-15-4	212454-16-5
	212454-17-6	212454-18-7	212454-19-8	212454-20-1	212454-21-2
	212454-22-3	212454-23-4	212454-24-5	212454-25-6	212454-26-7
	212454-27-8	212454-29-0	212454-32-5	212454-34-7	212454-35-8
	212454-36-9	212454-37-0	212454-38-1	212454-39-2	212454-40-5
	212454-41-6	212454-42-7	212454-43-8	212454-44-9	212454-45-0
	212454-46-1	212454-47-2	212454-48-3	212454-49-4	212454-50-7
	212454-51-8	212454-52-9	212454-53-0	212454-54-1	212454-55-2
	212454-56-3	212454-57-4	212454-58-5	212454-59-6	212454-60-9
	212454-61-0	212454-62-1	212454-63-2	212454-64-3	212454-65-4
	212454-66-5	212454-67-6	212454-68-7	212454-69-8	212454-70-1
	212454-71-2	212454-72-3	212454-73-4	212454-74-5	212454-75-6
	212454-76-7	212454-77-8	212454-78-9	212454-79-0	212454-80-3
	212454-81-4	212454-82-5	212454-83-6	212454-84-7	212454-85-8
	212454-86-9	212454-87-0	212454-88-1	212454-89-2	212454-90-5
	212454-91-6	212454-92-7	212454-93-8	212454-94-9	212454-95-0
	212454-96-1	212454-97-2	212454-98-3	212454-99-4	212455-00-0
	212455-01-1	212455-02-2	212455-03-3	212455-04-4	212455-05-5
	212455-06-6	212455-07-7	212455-08-8	212455-09-9	212455-10-2
	212455-11-3	212455-12-4	212455-13-5	212455-14-6	212455-15-7
	212455-16-8	212455-17-9	212455-18-0	212455-19-1	212455-20-4
	212455-21-5	212455-22-6	212455-23-7	212455-24-8	212455-25-9
	212455-26-0	212455-27-1	212455-28-2	212455-29-3	212455-30-6
	212455-31-7	212455-32-8	212455-33-9	212455-34-0	212455-35-1
	212455-36-2	212455-37-3	212455-38-4	212455-39-5	212455-40-8
	212455-41-9	212455-42-0	212455-44-2	212455-46-4	212455-48-6
	212455-50-0	212455-51-1	212455-52-2	212455-53-3	212455-54-4
	212455-55-5	212455-56-6	212455-57-7	212455-58-8	212455-59-9
	212455-60-2	212455-61-3	212455-62-4	212455-63-5	212455-64-6
	212455-65-7	212455-66-8	212455-67-9	212455-68-0	212455-69-1
	212455-70-4	212455-71-5	212455-72-6	212455-73-7	212455-74-8
	212455-75-9	212455-76-0	212455-77-1	212455-78-2	212455-79-3
	212455-80-6	212455-81-7	212455-82-8	212455-83-9	212455-84-0
	212455-85-1	212455-86-2	212455-87-3	212455-88-4	212455-89-5
	212455-90-8	212455-91-9	212455-92-0	212455-93-1	212455-94-2
	212455-95-3	212455-96-4	212455-97-5	212455-98-6	212455-99-7
	212456-00-3	212456-01-4	212456-02-5	212456-03-6	212456-04-7
	212456-05-8	212456-06-9	212456-07-0	212456-08-1	212456-09-2
	212456-10-5	212456-11-6	212456-12-7	212456-13-8	212456-14-9
	212456-15-0	212456-16-1	212456-17-2	212456-18-3	212456-19-4
	212456-20-7	212456-21-8	212456-22-9	212456-23-0	212456-24-1
	212456-25-2	212456-26-3	212456-27-4	212456-28-5	212456-29-6

212456-30-9 212456-31-0 212456-32-1 212456-33-2 212456-34-3  
 212456-35-4 212456-36-5 212456-37-6 212456-38-7 212456-39-8  
 212456-40-1 212456-41-2 212456-42-3

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(design and use of specific polyamide DNA-binding ligands for modulation of gene expression)

IT 212456-43-4 212456-44-5 212456-45-6 212456-46-7 212456-47-8  
 212456-48-9 212456-49-0 212456-50-3 212456-51-4 212456-52-5  
 212456-53-6 212456-54-7 212456-55-8 212456-56-9 212456-57-0  
 212456-58-1 212456-59-2 212456-60-5 212456-61-6 212456-62-7  
 212456-63-8 212456-64-9 212456-65-0 212456-66-1 212456-67-2  
 212456-68-3 212456-69-4 212456-70-7 212456-71-8 212456-72-9  
 212456-73-0 212456-74-1 212456-75-2 212456-76-3 212456-77-4  
 212456-78-5 212456-79-6 212456-80-9 212456-81-0 212456-82-1  
 212456-83-2 212456-84-3 212456-85-4 212456-86-5 212456-87-6  
 212456-88-7 212456-89-8 212456-90-1 212456-91-2 212456-92-3  
 212456-93-4 212456-94-5 212456-95-6 212456-96-7 212456-97-8  
 212456-98-9 212456-99-0 212457-00-6 212457-01-7 212457-02-8  
 212457-03-9 212457-04-0 212457-05-1 212457-06-2 212457-07-3  
 212457-08-4 212457-09-5 212457-10-8 212457-11-9 212457-12-0  
 212457-13-1 212457-14-2 212457-15-3 212457-16-4 212457-17-5  
 212457-18-6 212457-19-7 212457-20-0 212457-21-1 212457-22-2  
 212457-23-3 212457-24-4 212457-25-5 212457-26-6 212457-27-7  
 212457-28-8 212457-29-9 212457-30-2 212457-31-3 212457-32-4  
 212457-33-5 212457-34-6 212457-35-7 212457-36-8 212457-37-9  
 212457-38-0 212457-39-1 212457-40-4 212457-41-5 212457-42-6  
 212457-43-7 212457-44-8 212457-45-9 212457-46-0 212457-47-1  
 212457-48-2 212457-49-3 212457-50-6 212457-51-7 212457-52-8  
 212457-53-9 212457-54-0 212457-55-1 212457-56-2 212457-57-3  
 212457-58-4 212457-59-5 212457-60-8 212457-61-9 212457-62-0  
 212457-63-1 212457-64-2 212457-65-3 212457-66-4 212457-67-5  
 212457-68-6 212457-69-7 212457-70-0 212457-71-1 212457-72-2  
 212457-73-3 212457-74-4 212457-75-5 212457-76-6 212457-77-7  
 212457-78-8 212457-79-9 212457-80-2 212457-81-3 212457-82-4  
 212457-83-5 212457-84-6 212457-85-7 212457-86-8 212457-87-9  
 212457-88-0 212457-89-1 212457-90-4 212457-91-5 212457-92-6  
 212457-93-7 212457-94-8 212457-95-9 212457-97-1 212457-98-2  
 212457-99-3 212458-00-9 212458-01-0 212458-02-1 212458-03-2  
 212458-04-3 212458-05-4 212458-06-5 212458-07-6 212458-08-7  
 212458-09-8 212458-10-1 212458-11-2 212458-12-3 212458-13-4  
 212458-14-5 212458-15-6 212458-17-8 212458-19-0 212458-21-4  
 212458-23-6 212458-24-7 212458-25-8 212458-26-9 212458-27-0  
 212458-28-1 212458-29-2 212458-30-5 212458-31-6 212458-32-7  
 212458-33-8 212458-34-9 212458-35-0 212458-36-1 212458-37-2  
 212458-38-3 212458-39-4 212458-40-7 212458-41-8 212458-42-9  
 212458-43-0 212458-44-1 212458-45-2 212458-46-3 212458-47-4  
 212458-48-5 212458-49-6 212458-50-9 212458-51-0 212458-52-1  
 212458-53-2 212458-54-3 212458-55-4 212458-56-5 212458-57-6  
 212458-58-7 212458-59-8 212458-60-1 212458-61-2 212458-62-3  
 212458-63-4 212458-64-5 212458-65-6 212458-66-7 212458-67-8  
 212458-68-9 212458-69-0 212458-70-3 212458-71-4 212458-72-5  
 212458-73-6 212458-74-7 212458-75-8 212458-76-9 212458-77-0  
 212458-78-1 212458-79-2 212458-80-5

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(design and use of specific polyamide DNA-binding ligands for modulation of gene expression)

IT 212458-81-6 212458-82-7 212458-83-8 212458-84-9 212458-85-0

212458-86-1	212458-87-2	212458-88-3	212458-89-4	212458-90-7
212458-91-8	212458-92-9	212458-93-0	212458-94-1	212458-95-2
212458-96-3	212458-97-4	212458-98-5	212458-99-6	212459-00-2
212459-01-3	212459-02-4	212459-03-5	212459-04-6	212459-05-7
212459-06-8	212459-07-9	212459-08-0	212459-11-5	212459-13-7
212459-15-9	212459-17-1	212459-20-6	212459-22-8	212459-24-0
212459-26-2	212459-27-3	212459-28-4	212459-29-5	212459-30-8
212459-31-9	212459-32-0	212459-36-4	212459-40-0	212459-43-3
212459-47-7	212459-48-8	212459-51-3	212459-52-4	212459-53-5
212459-56-8	212459-57-9	212459-58-0	212459-59-1	212459-60-4
212459-61-5	212459-62-6	212459-63-7	212459-64-8	212459-65-9
212459-66-0	212459-67-1	212459-68-2	212459-69-3	212459-70-6
212459-71-7	212459-72-8	212459-73-9	212459-74-0	212459-75-1
212459-76-2	212459-77-3	212459-78-4	212459-79-5	212459-80-8
212459-81-9	212459-82-0	212459-83-1	212459-84-2	212459-85-3
212459-86-4	212459-87-5	212459-88-6	212459-89-7	212459-90-0
212459-91-1	212459-92-2	212459-93-3	212459-94-4	212459-95-5
212459-96-6	212459-97-7	212459-98-8	212459-99-9	212460-00-9
212460-01-0	212460-02-1	212460-03-2	212460-04-3	212460-05-4
212460-06-5	212460-07-6	212460-08-7	212460-09-8	212460-10-1
212460-11-2	212460-12-3	212460-13-4	212460-14-5	212460-15-6
212460-16-7	212460-17-8	212460-18-9	212460-19-0	212460-21-4
212460-22-5	212460-23-6	212460-24-7	212460-25-8	212460-26-9
212460-27-0	212460-28-1	212460-29-2	212460-30-5	212460-31-6
212460-32-7	212460-33-8	212460-34-9	212460-35-0	212460-36-1
212460-37-2	212460-38-3	212460-39-4	212460-40-7	212460-41-8
212460-42-9	212460-43-0	212460-44-1	212460-45-2	212460-46-3
212460-47-4	212460-48-5	212460-49-6	212460-50-9	212460-51-0
212460-52-1	212460-53-2	212460-55-4	212460-56-5	212460-57-6
212460-58-7	212460-59-8	212460-60-1	212460-61-2	212460-62-3
212460-63-4	212460-64-5	212460-65-6	212460-66-7	212460-67-8
212460-68-9	212460-69-0	212460-70-3	212460-71-4	212460-72-5
212460-73-6	212460-74-7	212460-75-8	212460-76-9	212460-77-0
212460-78-1	212460-79-2	212460-80-5	212460-81-6	212460-82-7
212460-83-8	212460-84-9	212460-85-0	212460-86-1	212460-87-2
212460-90-7	212460-92-9	212460-95-2	212460-98-5	212461-01-3
212461-03-5	212461-04-6	212461-05-7	212461-06-8	212461-07-9
212461-08-0	212461-09-1	212461-10-4	212461-11-5	212461-12-6
212461-14-8	212461-16-0	212461-17-1	212461-18-2	212461-19-3
212461-20-6	212461-21-7	212461-22-8	212461-23-9	212461-24-0
212461-25-1	212461-26-2	212461-27-3	212461-28-4	212461-29-5
212461-30-8	212461-31-9	212461-32-0	212461-33-1	212461-34-2
212461-35-3	212461-36-4	212461-37-5	212461-38-6	212461-39-7
212461-40-0	212461-41-1	212461-42-2	212461-43-3	212461-44-4
212461-45-5	212461-46-6	212461-47-7	212461-48-8	212461-49-9
212461-50-2	212461-51-3	212461-52-4		

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(design and use of specific polyamide DNA-binding ligands for modulation of gene expression)

IT	212461-53-5	212461-54-6	212461-55-7	212461-56-8	212461-57-9
	212461-58-0	212461-59-1	212461-60-4	212461-61-5	212461-62-6
	212461-63-7	212461-64-8	212461-65-9	212461-66-0	212461-67-1
	212461-68-2	212461-69-3	212461-70-6	212461-71-7	212461-72-8
	212461-73-9	212461-74-0	212461-75-1	212461-76-2	212461-77-3
	212461-78-4	212461-79-5	212461-80-8	212461-81-9	212461-82-0
	212461-83-1	212461-84-2	212461-85-3	212461-86-4	212461-87-5
	212461-88-6	212461-89-7	212461-90-0	212461-91-1	212461-92-2
	212461-93-3	212461-94-4	212461-95-5	212461-96-6	212461-97-7
	212461-98-8	212461-99-9	212462-00-5	212462-01-6	212462-02-7

212462-03-8	212462-04-9	212462-05-0	212462-06-1	212462-07-2
212462-08-3	212462-09-4	212462-10-7	212462-11-8	212462-12-9
212462-13-0	212462-14-1	212462-15-2	212462-16-3	212462-17-4
212462-18-5	212462-19-6	212462-20-9	212462-21-0	212462-22-1
212462-23-2	212462-24-3	212462-25-4	212462-26-5	212462-27-6
212462-28-7	212462-29-8	212462-30-1	212462-31-2	212462-32-3
212462-33-4	212462-34-5	212462-35-6	212462-36-7	212462-37-8
212462-39-0	212462-40-3	212462-41-4	212462-42-5	212462-43-6
212462-44-7	212462-45-8	212462-46-9	212462-47-0	212462-48-1
212462-49-2	212462-50-5	212462-51-6	212462-52-7	212462-53-8
212462-54-9	212462-55-0	212462-56-1	212462-57-2	212462-58-3
212462-59-4	212462-60-7	212462-61-8	212462-62-9	212462-63-0
212462-64-1	212462-65-2	212462-66-3	212462-67-4	212462-68-5
212462-69-6	212462-71-0	212462-75-4	212462-78-7	212462-80-1
212462-81-2	212462-82-3	212462-83-4	212462-84-5	212462-85-6
212462-87-8	212462-88-9	212462-89-0	212462-90-3	212462-91-4
212462-92-5	212462-93-6	212462-94-7	212462-95-8	212462-96-9
212462-99-2	212463-00-8	212463-01-9	212463-03-1	212463-06-4
212463-07-5	212463-11-1	212463-15-5	212463-16-6	212463-17-7
212463-18-8	212463-19-9	212463-20-2	212463-21-3	212463-22-4
212463-23-5	212463-24-6	212463-25-7	212463-26-8	212463-27-9
212463-28-0	212463-29-1	212463-30-4	212463-31-5	212463-32-6
212463-33-7	212463-34-8	212463-35-9	212463-36-0	212463-37-1
212463-38-2	212463-39-3	212463-40-6	212463-41-7	212463-42-8
212463-44-0	212463-45-1	212463-46-2	212463-47-3	212463-48-4
212463-49-5	212463-50-8	212463-51-9	212463-52-0	212463-53-1
212463-54-2	212463-55-3	212463-56-4	212463-58-6	212463-59-7
212463-60-0	212463-61-1	212463-62-2	212463-63-3	212463-64-4
212463-66-6	212463-67-7	212463-68-8	212463-69-9	212463-70-2
212463-71-3	212463-72-4	212463-73-5	212463-74-6	212463-75-7
212463-76-8	212463-77-9	212463-78-0	212463-79-1	212463-80-4
212463-81-5	212463-82-6	212463-83-7	212463-84-8	212463-85-9
212463-86-0	212463-87-1	212463-88-2	212463-89-3	212463-90-6
212463-91-7	212463-92-8	212463-93-9	212463-94-0	212463-95-1
212463-96-2	212463-97-3	212463-98-4	212463-99-5	212464-00-1
212464-01-2	212464-02-3	212464-03-4	212464-04-5	212464-05-6
212464-06-7	212464-07-8	212464-08-9		

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(design and use of specific polyamide DNA-binding ligands for modulation of gene expression)

IT	212464-09-0	212464-10-3	212464-11-4	212464-12-5	212464-13-6
	212464-14-7	212464-15-8	212464-16-9	212464-17-0	212464-18-1
	212464-19-2	212464-20-5	212464-21-6	212464-22-7	212464-23-8
	212464-24-9	212464-25-0	212464-26-1	212464-27-2	212464-28-3
	212464-29-4	212464-30-7	212464-31-8	212464-32-9	212464-33-0
	212464-34-1	212464-35-2	212464-36-3	212464-37-4	212464-38-5
	212464-39-6	212464-40-9	212464-41-0	212464-42-1	212464-43-2
	212464-44-3	212464-45-4	212464-47-6	212464-48-7	212464-49-8
	212464-50-1	212464-51-2	212464-52-3	212464-53-4	212464-54-5
	212464-55-6	212464-56-7	212464-57-8	212464-58-9	212464-59-0
	212464-60-3	212464-61-4	212464-62-5	212464-63-6	212464-64-7
	212464-65-8	212464-66-9	212464-67-0	212464-68-1	212464-69-2
	212464-70-5	212464-71-6	212464-72-7	212464-73-8	212464-74-9
	212464-75-0	212464-76-1	212464-77-2	212464-78-3	212464-79-4
	212464-80-7	212464-81-8	212464-82-9	212464-83-0	212464-84-1
	212464-85-2	212464-86-3	212464-87-4	212464-88-5	212464-89-6
	212464-90-9	212464-91-0	212464-92-1	212464-93-2	212464-94-3
	212464-95-4	212464-96-5	212464-97-6	212464-98-7	212464-99-8
	212465-00-4	212465-01-5	212465-02-6	212465-03-7	212465-04-8

212465-05-9	212465-06-0	212465-07-1	212465-08-2	212465-09-3
212465-10-6	212465-11-7	212465-12-8	212465-13-9	212465-14-0
212465-15-1	212465-16-2	212465-17-3	212465-18-4	212465-19-5
212465-20-8	212465-21-9	212465-22-0	212465-23-1	212465-24-2
212465-25-3	212465-26-4	212465-27-5	212465-28-6	212465-29-7
212465-30-0	212465-31-1	212465-32-2	212465-33-3	212465-34-4
212465-35-5	212465-36-6	212465-37-7	212465-38-8	212465-39-9
212465-40-2	212465-41-3	212465-42-4	212465-43-5	212465-44-6
212465-45-7	212465-46-8	212465-47-9	212465-48-0	212465-49-1
212465-50-4	212465-51-5	212465-52-6	212465-53-7	212465-54-8
212465-55-9	212465-56-0	212465-57-1	212465-58-2	212465-59-3
212465-60-6	212465-61-7	212465-62-8	212465-63-9	212465-64-0
212465-65-1	212465-66-2	212465-67-3	212465-68-4	212465-69-5
212465-70-8	212465-71-9	212465-72-0	212465-73-1	212465-74-2
212465-75-3	212465-76-4	212465-77-5	212465-78-6	212465-79-7
212465-81-1	212465-83-3	212465-85-5	212465-87-7	212465-89-9
212465-90-2	212465-91-3	212465-92-4	212465-93-5	212465-94-6
212465-95-7	212465-96-8	212465-97-9	212465-98-0	212465-99-1
212466-01-8	212466-03-0	212466-05-2	212466-07-4	212466-10-9
212466-12-1	212466-14-3	212466-15-4	212466-17-6	212466-19-8
212466-21-2	212466-23-4	212466-25-6	212466-26-7	212466-27-8
212466-28-9	212466-29-0	212466-30-3	212466-31-4	212466-32-5
212466-33-6	212466-34-7	212466-35-8	212466-36-9	212466-37-0
212466-38-1	212466-39-2	212466-40-5	212466-41-6	212466-42-7
212466-43-8	212466-44-9	212466-45-0	212466-46-1	212466-47-2
212466-48-3	212466-49-4	212466-50-7	212466-51-8	212466-52-9
212466-53-0	212466-54-1	212466-55-2	212466-56-3	212466-57-4
212466-58-5	212466-59-6	212466-60-9		

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(design and use of specific polyamide DNA-binding ligands for modulation of gene expression)

IT	212466-61-0	212466-62-1	212466-63-2	212466-64-3	212466-65-4
	212466-66-5	212466-67-6	212466-68-7	212466-69-8	212466-70-1
	212466-71-2	212466-72-3	212466-73-4	212466-74-5	212466-75-6
	212466-76-7	212466-77-8	212466-78-9	212466-79-0	212466-80-3
	212466-82-5	212466-84-7	212466-86-9	212466-88-1	212466-90-5
	212466-91-6	212466-93-8	212466-95-0	212466-97-2	212466-99-4
	212467-01-1	212467-03-3	212467-05-5	212467-07-7	212467-09-9
	212467-11-3	212467-13-5	212467-15-7	212467-17-9	212467-19-1
	212467-21-5	212467-23-7	212467-25-9	212467-27-1	212467-29-3
	212467-31-7	212467-33-9	212467-35-1	212467-37-3	212467-39-5
	212467-41-9	212467-43-1	212467-45-3	212467-48-6	212467-50-0
	212467-53-3	212467-55-5	212467-58-8	212467-61-3	212467-64-6
	212467-67-9	212467-70-4	212467-73-7	212467-75-9	212467-78-2
	212467-81-7	212467-84-0	212467-87-3	212467-91-9	212467-94-2
	212467-97-5	212468-00-3	212468-02-5	212468-05-8	212468-08-1
	212468-10-5	212468-12-7	212468-14-9	212468-16-1	212468-18-3
	212468-20-7	212468-22-9	212468-24-1	212468-26-3	212468-28-5
	212468-30-9	212468-32-1	212468-34-3	212468-36-5	212468-38-7
	212468-40-1	212468-42-3	212468-43-4	212468-44-5	212468-45-6
	212468-46-7	212468-47-8	212468-48-9	212468-50-3	212468-52-5
	212468-54-7	212468-55-8	212468-56-9	212468-57-0	212468-58-1
	212468-59-2	212468-60-5	212468-61-6	212468-62-7	212468-63-8
	212468-64-9	212468-65-0	212468-66-1	212468-67-2	212468-68-3
	212468-69-4	212468-70-7	212468-71-8	212468-72-9	212468-73-0
	212468-74-1	212468-75-2	212468-76-3	212468-77-4	212468-78-5
	212468-79-6	212468-80-9	212468-81-0	212468-82-1	212468-83-2
	212468-84-3	212468-85-4	212468-86-5	212468-87-6	212468-88-7
	212468-89-8	212468-90-1	212468-91-2	212468-92-3	212468-93-4

212468-94-5	212468-95-6	212468-96-7	212468-97-8	212468-98-9
212468-99-0	212469-00-6	212469-01-7	212469-02-8	212469-03-9
212469-04-0	212469-05-1	212469-06-2	212469-07-3	212469-08-4
212469-09-5	212469-10-8	212469-11-9	212469-12-0	212469-13-1
212469-14-2	212469-15-3	212469-17-5	212469-19-7	212469-21-1
212469-23-3	212469-24-4	212469-25-5	212469-26-6	212469-27-7
212469-28-8	212469-29-9	212469-30-2	212469-31-3	212469-32-4
212469-33-5	212469-34-6	212469-35-7	212469-36-8	212469-37-9
212469-38-0	212469-39-1	212469-40-4	212469-41-5	212469-42-6
212469-43-7	212469-44-8	212469-45-9	212469-46-0	212469-47-1
212469-48-2	212469-50-6	212469-51-7	212469-52-8	212469-53-9
212469-54-0	212469-55-1	212469-56-2	212469-57-3	212469-58-4
212469-59-5	212469-60-8	212469-61-9	212469-62-0	212469-63-1
212469-64-2	212469-65-3	212469-66-4	212469-67-5	212469-68-6
212469-69-7	212469-70-0	212469-71-1	212469-72-2	212469-73-3
212469-74-4	212469-75-5	212469-76-6	212469-77-7	212469-78-8
212469-79-9	212469-80-2	212469-81-3	212469-82-4	212469-83-5
212469-84-6	212469-85-7	212469-86-8	212469-87-9	212469-88-0
212469-89-1	212469-90-4	212469-91-5		

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(design and use of specific polyamide DNA-binding ligands for modulation of gene expression)

IT	212469-92-6	212469-93-7	212469-94-8	212469-95-9	212469-96-0
	212469-97-1	212469-98-2	212469-99-3	212470-00-3	212470-01-4
	212470-02-5	212470-03-6	212470-04-7	212470-05-8	212470-06-9
	212470-07-0	212470-08-1	212470-09-2	212470-11-6	212470-12-7
	212470-13-8	212470-14-9	212470-15-0	212470-16-1	212470-17-2
	212470-18-3	212470-19-4	212470-20-7	212470-21-8	212470-22-9
	212470-23-0	212470-24-1	212470-25-2	212470-26-3	212470-27-4
	212470-28-5	212470-29-6	212470-30-9	212470-31-0	212470-32-1
	212470-33-2	212470-34-3	212470-35-4	212470-36-5	212470-37-6
	212470-38-7	212470-39-8	212470-40-1	212470-41-2	212470-42-3
	212470-44-5	212470-46-7	212470-48-9	212470-50-3	212470-51-4
	212470-52-5	212470-53-6	212470-54-7	212470-55-8	212470-56-9
	212470-57-0	212470-58-1	212470-59-2	212470-60-5	212470-61-6
	212470-62-7	212470-63-8	212470-64-9	212470-65-0	212470-66-1
	212470-67-2	212470-68-3	212470-69-4	212470-70-7	212470-71-8
	212470-72-9	212470-73-0	212470-74-1	212470-75-2	212470-76-3
	212470-77-4	212470-78-5	212470-79-6	212470-80-9	212470-81-0
	212470-82-1	212470-83-2	212470-84-3	212470-85-4	212470-87-6
	212470-89-8	212470-90-1	212470-91-2	212470-92-3	212470-93-4
	212470-94-5	212470-95-6	212470-96-7	212470-97-8	212470-98-9
	212470-99-0	212471-00-6	212471-01-7	212471-02-8	212471-03-9
	212471-04-0	212471-05-1	212471-06-2	212471-07-3	212471-08-4
	212471-09-5	212471-10-8	212471-11-9	212471-12-0	212471-13-1
	212471-14-2	212471-15-3	212471-16-4	212471-17-5	212471-18-6
	212471-19-7	212471-20-0	212471-21-1	212471-22-2	212471-23-3
	212471-24-4	212471-25-5	212471-26-6	212471-27-7	212471-29-9
	212471-31-3	212471-33-5	212471-34-6	212471-36-8	212471-38-0
	212471-39-1	212471-41-5	212471-42-6	212471-44-8	212471-46-0
	212471-48-2	212471-49-3	212471-51-7	212471-53-9	212471-54-0
	212471-56-2	212471-57-3	212471-59-5	212471-61-9	212471-62-0
	212471-63-1	212471-64-2	212471-65-3	212471-66-4	212471-67-5
	212471-68-6	212471-69-7	212471-70-0	212471-71-1	212471-72-2
	212471-73-3	212471-74-4	212471-75-5	212471-76-6	212471-77-7
	212471-78-8	212471-79-9	212471-80-2	212471-81-3	212471-82-4
	212471-83-5	212471-84-6	212471-85-7	212471-86-8	212471-87-9
	212471-88-0	212471-89-1	212471-90-4	212471-91-5	212471-92-6
	212471-93-7	212471-94-8	212471-95-9	212471-96-0	212471-97-1

212471-98-2	212471-99-3	212472-00-9	212472-01-0	212472-02-1
212472-03-2	212472-04-3	212472-05-4	212472-06-5	212472-07-6
212472-08-7	212472-09-8	212472-10-1	212472-11-2	212472-12-3
212472-13-4	212472-14-5	212472-16-7	212472-18-9	212472-19-0
212472-20-3	212472-21-4	212472-22-5	212472-23-6	212472-24-7
212472-25-8	212472-26-9	212472-27-0	212472-28-1	212472-29-2
212472-30-5	212472-31-6	212472-33-8	212472-34-9	212472-35-0
212472-36-1	212472-37-2	212472-38-3	212472-39-4	212472-40-7
212472-41-8	212472-42-9	212472-43-0	212472-44-1	212472-45-2
212472-46-3	212472-47-4	212472-49-6		

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(design and use of specific polyamide DNA-binding ligands for modulation of gene expression)

IT	212472-51-0	212472-53-2	212472-54-3	212472-56-5	212472-58-7
	212472-60-1	212472-62-3	212472-63-4	212472-64-5	212472-65-6
	212472-66-7	212472-68-9	212472-70-3	212472-72-5	212472-74-7
	212472-76-9	212472-78-1	212472-79-2	212472-81-6	212472-83-8
	212472-85-0	212472-86-1	212472-87-2	212472-88-3	212472-89-4
	212472-90-7	212472-91-8	212472-92-9	212472-93-0	212472-94-1
	212472-95-2	212472-96-3	212472-97-4	212472-98-5	212472-99-6
	212473-00-2	212473-01-3	212473-02-4	212473-03-5	212473-04-6
	212473-05-7	212473-06-8	212473-07-9	212473-08-0	212473-09-1
	212473-10-4	212473-11-5	212473-12-6	212473-13-7	212473-14-8
	212473-15-9	212473-16-0	212473-17-1	212473-18-2	212473-19-3
	212473-20-6	212473-21-7	212473-22-8	212473-23-9	212473-24-0
	212473-25-1	212473-26-2	212473-27-3	212473-28-4	212473-29-5
	212473-30-8	212473-31-9	212473-32-0	212473-33-1	212473-34-2
	212473-35-3	212473-36-4	212473-37-5	212473-38-6	212473-39-7
	212473-40-0	212473-41-1	212473-42-2	212473-43-3	212473-44-4
	212473-45-5	212473-46-6	212473-47-7	212473-48-8	212473-49-9
	212473-50-2	212473-51-3	212473-52-4	212473-53-5	212473-54-6
	212473-55-7	212473-56-8	212473-57-9	212473-58-0	212473-59-1
	212473-60-4	212473-61-5	212473-62-6	212473-63-7	212473-64-8
	212473-65-9	212473-66-0	212473-67-1	212473-68-2	212473-69-3
	212473-70-6	212473-71-7	212473-72-8	212473-74-0	212473-75-1
	212473-76-2	212473-77-3	212473-78-4	212473-79-5	212473-80-8
	212473-81-9	212473-82-0	212473-83-1	212473-84-2	212473-85-3
	212473-87-5	212473-88-6	212473-89-7	212473-90-0	212473-91-1
	212473-92-2	212473-93-3	212473-94-4	212473-95-5	212473-96-6
	212473-97-7	212473-98-8	212473-99-9	212474-00-5	212474-01-6
	212474-02-7	212474-03-8	212474-04-9	212474-05-0	212474-06-1
	212474-07-2	212474-08-3	212474-09-4	212474-10-7	212474-11-8
	212474-12-9	212474-13-0	212474-14-1	212474-15-2	212474-16-3
	212474-17-4	212474-18-5	212474-19-6	212474-20-9	212474-21-0
	212474-22-1	212474-23-2	212474-24-3	212474-25-4	212474-26-5
	212474-27-6	212474-28-7	212474-29-8	212474-30-1	212474-31-2
	212474-32-3	212474-33-4	212474-34-5	212474-35-6	212474-36-7
	212474-37-8	212474-38-9	212474-39-0	212474-40-3	212474-41-4
	212474-42-5	212474-43-6	212474-44-7	212474-45-8	212474-46-9
	212474-47-0	212474-48-1	212474-49-2	212474-50-5	212474-51-6
	212474-52-7	212474-53-8	212474-54-9	212474-55-0	212474-56-1
	212474-57-2	212474-58-3	212474-59-4	212474-60-7	212474-61-8
	212474-62-9	212474-63-0	212474-64-1	212474-65-2	212474-66-3
	212474-67-4	212474-69-6	212474-70-9	212474-71-0	212474-72-1
	212474-73-2	212474-74-3	212474-75-4	212474-76-5	212474-77-6
	212474-78-7	212474-79-8	212474-80-1	212474-81-2	212474-82-3
	212474-83-4	212474-84-5	212474-85-6	212474-86-7	212474-87-8
	212474-88-9	212474-89-0	212474-90-3	212474-91-4	212474-92-5
	212474-93-6	212474-94-7	212474-95-8	212474-96-9	212474-97-0



212474-98-1 212474-99-2 212475-00-8

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(design and use of specific polyamide DNA-binding ligands for modulation of gene expression)

IT	212475-01-9	212475-02-0	212475-03-1	212475-04-2	212475-05-3
	212475-06-4	212475-07-5	212475-08-6	212475-09-7	212475-10-0
	212475-11-1	212475-12-2	212475-13-3	212475-14-4	212475-15-5
	212475-16-6	212475-17-7	212475-18-8	212475-19-9	212475-20-2
	212475-21-3	212475-22-4	212475-23-5	212475-24-6	212475-25-7
	212475-26-8	212475-27-9	212475-28-0	212475-30-4	212475-32-6
	212475-34-8	212475-35-9	212475-36-0	212475-37-1	212475-38-2
	212475-40-6	212475-42-8	212475-43-9	212475-45-1	212475-46-2
	212475-47-3	212475-48-4	212475-49-5	212475-50-8	212475-51-9
	212475-52-0	212475-53-1	212475-54-2	212475-55-3	212475-57-5
	212475-59-7	212475-61-1	212475-63-3	212475-65-5	212475-67-7
	212475-69-9	212475-71-3	212475-73-5	212475-75-7	212475-77-9
	212475-79-1	212475-81-5	212475-84-8	212475-86-0	212475-88-2
	212475-90-6	212475-92-8	212475-94-0	212475-95-1	212475-97-3
	212475-99-5	212476-00-1	212476-01-2	212476-02-3	212476-03-4
	212476-04-5	212476-05-6	212476-06-7	212476-07-8	212476-08-9
	212476-09-0	212476-10-3	212476-11-4	212476-12-5	212476-13-6
	212476-14-7	212476-15-8	212476-16-9	212476-17-0	212476-18-1
	212476-19-2	212476-20-5	212476-22-7	212476-24-9	212476-26-1
	212476-28-3	212476-30-7	212476-32-9	212476-34-1	212476-37-4
	212476-40-9	212476-43-2	212476-46-5	212476-49-8	212476-52-3
	212476-55-6	212476-58-9	212476-61-4	212476-64-7	212476-67-0
	212476-71-6	212476-73-8	212476-76-1	212476-79-4	212476-81-8
	212476-83-0	212476-85-2	212476-87-4	212476-89-6	212476-91-0
	212476-93-2	212476-97-6	212476-99-8	212477-01-5	212477-03-7
	212477-06-0	212477-09-3	212477-12-8	212477-15-1	212477-17-3
	212477-20-8	212477-22-0	212477-24-2	212477-25-3	212477-27-5
	212477-29-7	212477-30-0	212477-31-1	212477-32-2	212477-33-3
	212477-34-4	212477-35-5	212477-36-6	212477-37-7	212477-38-8
	212477-39-9	212477-40-2	212477-41-3	212477-42-4	212477-43-5
	212477-44-6	212477-45-7	212477-46-8	212477-47-9	212477-48-0
	212477-49-1	212477-50-4	212477-51-5	212477-52-6	212477-53-7
	212477-54-8	212477-55-9	212477-56-0	212477-57-1	212477-58-2
	212477-59-3	212477-60-6	212477-61-7	212477-62-8	212477-63-9
	212477-64-0	212477-65-1	212477-66-2	212477-67-3	212477-68-4
	212477-69-5	212477-70-8	212477-71-9	212477-72-0	212477-73-1
	212477-74-2	212477-75-3	212477-76-4	212477-77-5	212477-78-6
	212477-79-7	212477-80-0	212477-81-1	212477-82-2	212477-83-3
	212477-84-4	212477-85-5	212477-86-6	212477-87-7	212477-88-8
	212477-89-9	212477-90-2	212477-91-3	212477-92-4	212477-93-5
	212477-94-6	212477-95-7	212477-96-8	212477-97-9	212477-98-0
	212477-99-1	212478-00-7	212478-01-8	212478-02-9	212478-03-0
	212478-04-1	212478-05-2	212478-06-3	212478-07-4	212478-08-5
	212478-09-6	212478-10-9	212478-11-0	212478-12-1	212478-14-3
	212478-16-5	212478-18-7	212478-20-1	212478-21-2	212478-23-4
	212478-25-6	212478-27-8	212478-29-0	212478-30-3	212478-31-4
	212478-32-5	212478-33-6	212478-34-7		

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(design and use of specific polyamide DNA-binding ligands for modulation of gene expression)

IT	212478-35-8	212478-36-9	212478-37-0	212478-38-1	212478-39-2
	212478-40-5	212478-41-6	212478-42-7	212478-43-8	212478-44-9
	212478-45-0	212478-46-1	212478-47-2	212478-48-3	212478-49-4

212478-50-7	212478-51-8	212478-52-9	212478-53-0	212478-54-1
212478-55-2	212478-56-3	212478-57-4	212478-58-5	212478-59-6
212478-60-9	212478-61-0	212478-62-1	212478-63-2	212478-64-3
212478-65-4	212478-66-5	212478-67-6	212478-68-7	212478-69-8
212478-70-1	212478-71-2	212478-72-3	212478-73-4	212478-74-5
212478-75-6	212478-76-7	212478-78-9	212478-80-3	212478-82-5
212478-84-7	212478-86-9	212478-88-1	212478-91-6	212478-92-7
212478-93-8	212478-94-9	212478-95-0	212478-96-1	212478-97-2
212478-98-3	212478-99-4	212479-00-0	212479-01-1	212479-02-2
212479-03-3	212479-04-4	212479-05-5	212479-06-6	212479-07-7
212479-08-8	212479-09-9	212479-10-2	212479-11-3	212479-13-5
212479-15-7	212479-17-9	212479-18-0	212479-20-4	212479-22-6
212479-23-7	212479-25-9	212479-28-2	212479-30-6	212479-33-9
212479-37-3	212479-39-5	212479-41-9	212479-44-2	212479-46-4
212479-48-6	212479-50-0	212479-52-2	212479-54-4	212479-55-5
212479-57-7	212479-59-9	212479-61-3	212479-62-4	212479-63-5
212479-64-6	212479-65-7	212479-66-8	212479-67-9	212479-68-0
212479-69-1	212479-70-4	212479-71-5	212479-72-6	212479-73-7
212479-74-8	212479-75-9	212479-76-0	212479-77-1	212479-78-2
212479-79-3	212479-80-6	212479-81-7	212479-82-8	212479-84-0
212479-86-2	212479-88-4	212479-91-9	212479-93-1	212479-95-3
212479-97-5	212479-99-7	212480-04-1	212480-05-2	212480-07-4
212480-09-6	212480-15-4	212480-16-5	212480-18-7	212480-20-1
212480-22-3	212480-24-5	212480-26-7	212480-27-8	212480-30-3
212480-34-7	212480-37-0	212480-40-5	212480-44-9	212480-47-2
212480-51-8	212480-54-1	212480-58-5	212480-61-0	212480-64-3
212480-67-6	212480-70-1	212480-73-4	212480-77-8	212480-81-4
212480-85-8	212480-89-2	212480-92-7	212480-94-9	212480-98-3
212481-01-1	212481-04-4	212481-06-6	212481-09-9	212481-11-3
212481-15-7	212481-18-0	212481-21-5	212481-24-8	212481-27-1
212481-30-6	212481-32-8	212481-37-3	212481-40-8	212481-43-1
212481-46-4	212481-55-5	212481-60-2	212481-64-6	212481-68-0
212481-73-7	212481-75-9	212481-79-3	212481-82-8	212481-85-1
212481-88-4	212481-91-9	212481-94-2	212481-96-4	212481-97-5
212481-99-7	212482-01-4	212482-02-5	212482-04-7	212482-06-9
212482-08-1	212482-09-2	212482-11-6	212482-13-8	212482-14-9
212482-16-1	212482-18-3	212482-20-7	212482-22-9	212482-23-0
212482-25-2	212482-28-5	212482-31-0	212482-34-3	212482-66-1
212482-68-3	212482-69-4	212482-72-9	212482-73-0	212482-74-1
212482-75-2	212482-76-3	212482-77-4	212482-78-5	212482-79-6
212482-80-9	212482-81-0	212482-82-1	212482-83-2	212482-84-3
212482-85-4	212482-86-5	212482-87-6	212482-88-7	212482-89-8
212482-92-3	212482-93-4	212482-94-5	212482-95-6	212482-96-7
212482-97-8	212482-98-9	212482-99-0		

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(design and use of specific polyamide DNA-binding ligands for modulation of gene expression)

IT	212483-00-6	212483-01-7	212483-02-8	212483-03-9	212483-04-0
	212483-05-1	212483-06-2	212483-07-3	212483-08-4	212483-09-5
	212483-10-8	212483-11-9	212483-12-0	212483-13-1	212483-14-2
	212483-15-3	212483-16-4	212483-17-5	212483-18-6	212483-20-0
	212483-21-1	212483-22-2	212483-23-3	212483-24-4	212483-25-5
	212483-26-6	212483-27-7	212483-28-8	212483-29-9	212483-30-2
	212483-31-3	212483-32-4	212483-33-5	212483-34-6	212483-35-7
	212483-36-8	212483-37-9	212483-38-0	212483-39-1	212483-40-4
	212483-41-5	212483-42-6	212483-43-7	212483-44-8	212483-45-9
	212483-46-0	212483-47-1	212483-48-2	212483-49-3	212483-52-8
	212483-53-9	212483-54-0	212483-55-1	212483-57-3	212483-59-5
	212483-60-8	212483-62-0	212483-64-2	212483-67-5	212483-69-7

212483-70-0	212483-72-2	212483-74-4	212483-77-7	212483-80-2
212483-82-4	212483-84-6	212483-86-8	212483-88-0	212483-90-4
212483-91-5	212483-92-6	212483-94-8	212483-95-9	212483-96-0
212483-97-1	212483-98-2	212483-99-3	212484-00-9	212484-01-0
212484-02-1	212484-03-2	212484-05-4	212484-06-5	212484-07-6
212484-08-7	212484-10-1	212484-11-2	212484-13-4	212484-15-6
212484-16-7	212484-18-9	212484-20-3	212484-21-4	212484-22-5
212484-23-6	212484-24-7	212484-25-8	212484-26-9	212484-27-0
212484-28-1	212484-30-5	212484-32-7	212484-33-8	212484-34-9
212484-35-0	212484-36-1	212484-37-2	212484-38-3	212484-41-8
212484-42-9	212484-43-0	212484-44-1	212484-45-2	212484-46-3
212484-47-4	212484-48-5	212484-49-6	212484-50-9	212484-51-0
212484-52-1	212484-53-2	212484-55-4	212484-56-5	212484-57-6
212484-58-7	212484-59-8	212484-60-1	212484-61-2	212484-62-3
212484-64-5	212484-67-8	212484-70-3	212484-71-4	212484-72-5
212484-73-6	212484-74-7	212484-75-8	212484-76-9	212484-77-0
212484-78-1	212484-80-5	212484-81-6	212484-82-7	212484-83-8
212484-84-9	212484-85-0	212484-86-1	212484-87-2	212484-88-3
212484-89-4	212484-90-7	212484-98-5	212485-00-2	212485-01-3
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RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(design and use of specific polyamide DNA-binding ligands for modulation of gene expression)

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(design and use of specific polyamide DNA-binding ligands for modulation of gene expression)

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RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(design and use of specific polyamide DNA-binding ligands for modulation of gene expression)

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Baird, E; JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 1996, V118(26), P6141 HCAPLUS
- (2) Parks, M; JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 1996, V118(26), P6147 HCAPLUS
- (3) Parks, M; JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 1996, V118(26), P6153 HCAPLUS
- (4) Pharmacia; WO 9605196 A 1996 HCAPLUS
- (5) Swalley, S; JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 1996, V118(35), P8198 HCAPLUS
- (6) Swalley, S; JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 1997, V119(30), P6953 HCAPLUS
- (7) Trauger, J; NATURE 1996, V382(6591), P559 HCAPLUS
- (8) Walker, W; PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES, U S A 1997, V94(11), P5634 HCAPLUS

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206128-31-6

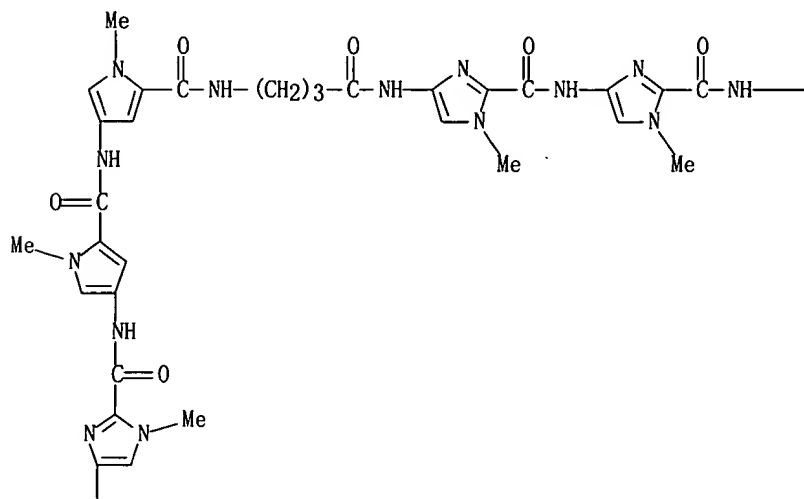
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 (design and use of specific polyamide DNA-binding ligands for  
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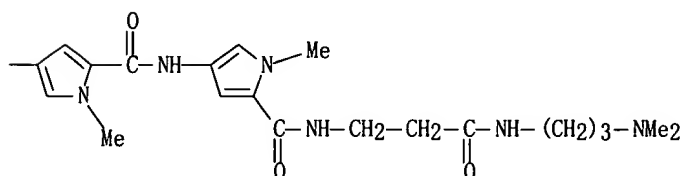
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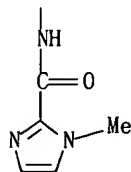
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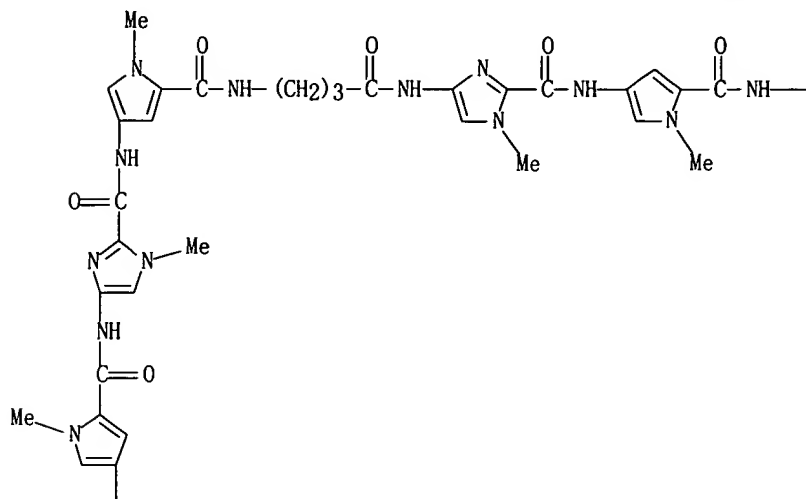
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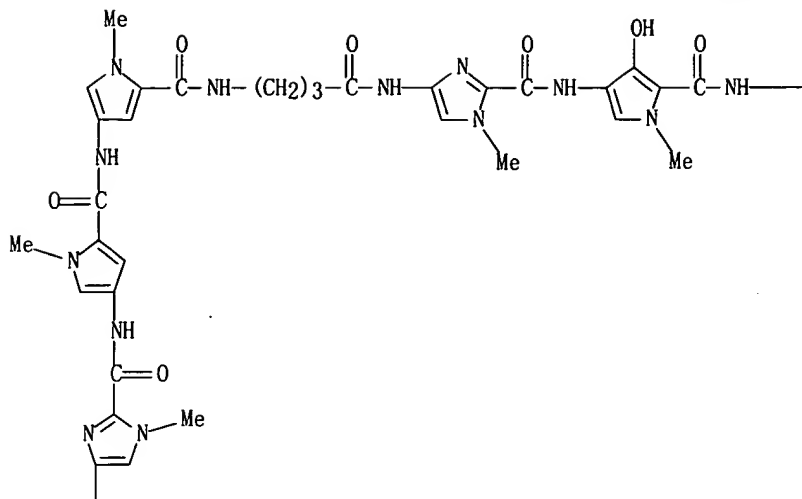
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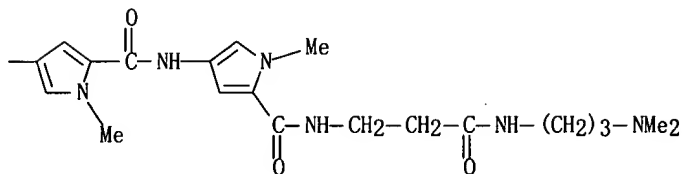
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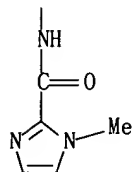
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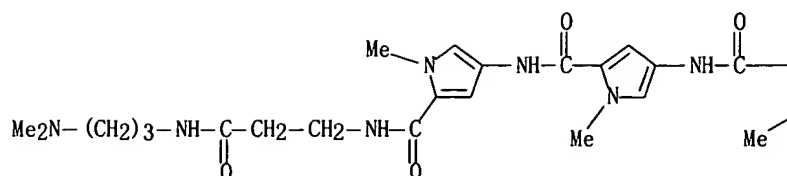
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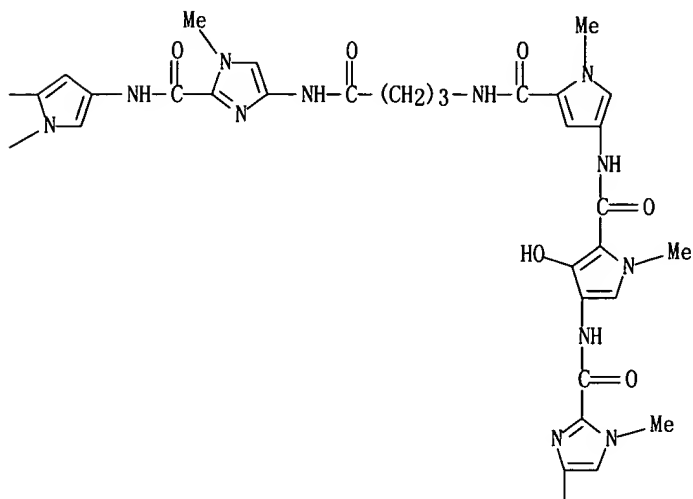
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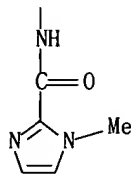
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PAGE 1-B



PAGE 2-B



L42 ANSWER 12 OF 17 HCAPLUS COPYRIGHT 2005 ACS on STN  
 AN 1998:604904 HCAPLUS  
 DN 129:198863  
 ED Entered STN: 24 Sep 1998  
 TI Polyamides binding to minor groove of double-stranded DNA and their use in  
 control of gene expression  
 IN Baird, Eldon E.; Dervan, Peter B.  
 PA California Institute of Technology, USA  
 SO PCT Int. Appl., 78 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 IC ICM C07D207-34  
 ICS C07D233-90; A61K031-415; C07D403-14; C12Q001-68



CC 3-1 (Biochemical Genetics)  
Section cross-reference(s): 27

FAN.CNT 11

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	US 1996-24374P	P	19960801	<--	
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# CLASS

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AB The invention encompasses improved polyamides for binding to specific nucleotide sequences in the minor groove of double-stranded DNA. The polyamides are in the form of a hairpin comprising two groups of a least three consecutive carboxamide residues, the two groups covalently linked by an aliphatic amino acid residue, preferably .gamma.-aminobutyric acid or

2,4-diaminobutyric acid, the consecutive carboxamide residues of the first group pairing in an antiparallel manner with the consecutive carboxamide residues of the second group in the minor groove of double-stranded DNA. The 3-hydroxy-N-methylpyrrole/N-methylpyrrole carboxamide pair specifically recognizes the T.A base pair, while the N-methylpyrrole/3-hydroxy-N-methylpyrrole pair recognizes A.T nucleotide pairs. Similarly, an N-methylimidazole/N-methylpyrrole carboxamide pair specifically recognizes the G.C nucleotide pair, and the N-methylpyrrole/N-methylimidazole carboxamide pair recognizes the C.G nucleotide pair. Preferably, the binding of the polyamide to the DNA modulates the expression of a gene. Increased specificity of 3-hydroxy-N-methylpyrrole-containing polyamides was demonstrated. Polyamide-EDTA conjugates were prepared and used in DNA cleavage. Inclusion of .beta.-alanine in the carboxamide was also shown to improve specificity of pyrrole-imidazole-containing polyamides.

- ST polyamide pyrrole hydroxypyrrole DNA binding; gene expression polyamide pyrrole hydroxypyrrole contg
- IT Gene  
(expression; polyamides binding to minor groove of double-stranded DNA and their use in control of gene expression)
- IT DNA  
Gene  
Promoter (genetic element)  
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
(polyamides binding to minor groove of double-stranded DNA and their use in control of gene expression)
- IT Polyamides, biological studies  
RL: BPR (Biological process); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)  
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RL: BPR (Biological process); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)

(polyamides binding to minor groove of double-stranded DNA and their use in control of gene expression)

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RL: BPR (Biological process); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)

(polyamides binding to minor groove of double-stranded DNA and their use in control of gene expression)

IT 65171-82-6

RL: RCT (Reactant); RACT (Reactant or reagent)

(polyamides binding to minor groove of double-stranded DNA and their use in control of gene expression)

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RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(polyamides binding to minor groove of double-stranded DNA and their use in control of gene expression)

RE. CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD

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 (7) Trauger, J; NATURE 1996, V382(6591), P559 HCAPLUS  
 (8) Walker, W; PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES, U S A 1997, V94(11), P5634 HCAPLUS

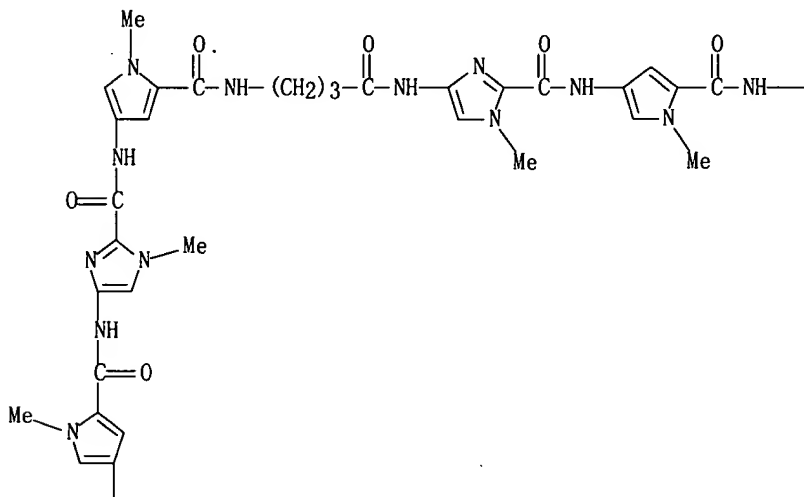
IT 193743-37-2P 206128-30-5P 206128-31-6P

RL: BPR (Biological process); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)  
 (polyamides binding to minor groove of double-stranded DNA and their use in control of gene expression)

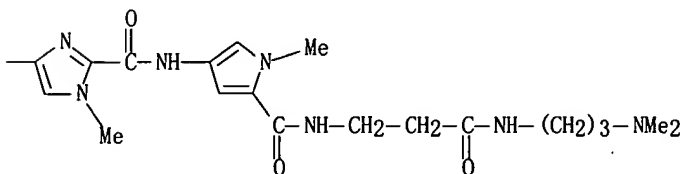
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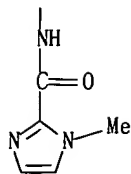
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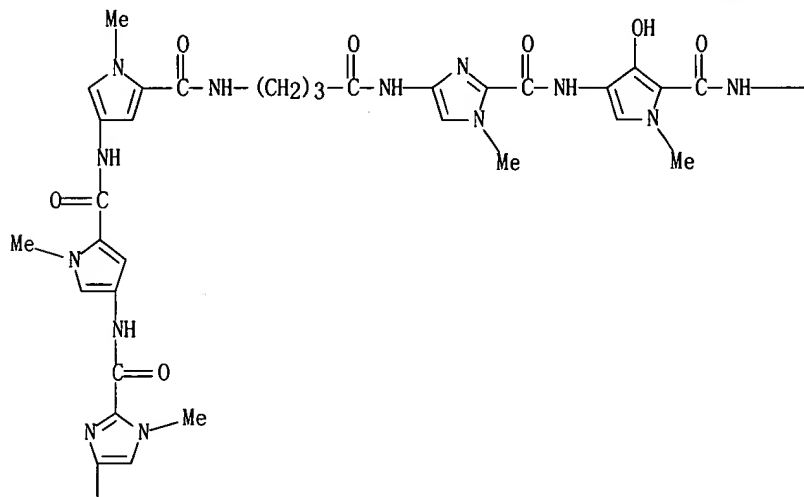
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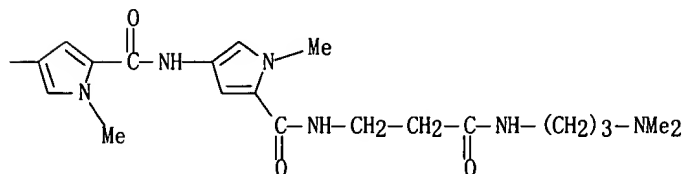
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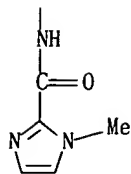
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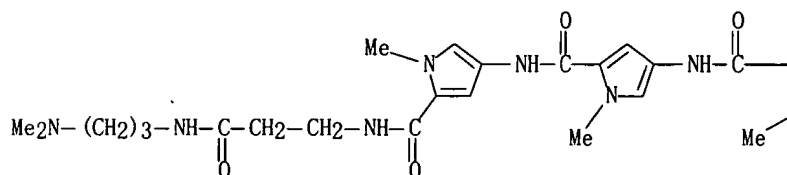
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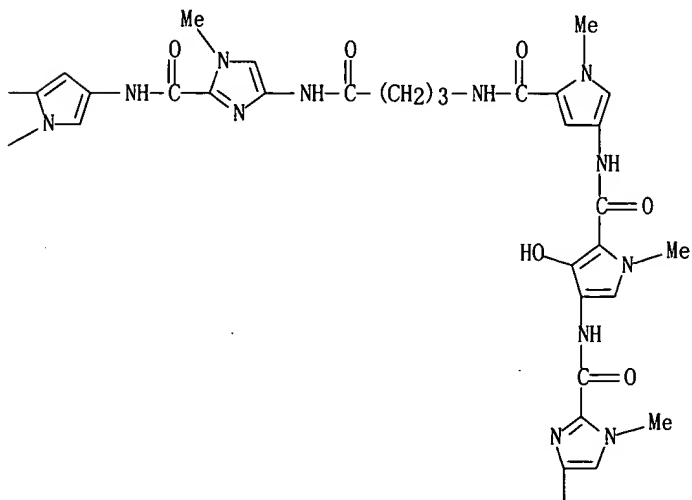
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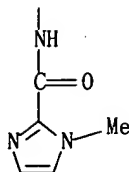
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PAGE 1-B



PAGE 2-B



L42 ANSWER 13 OF 17 HCAPLUS COPYRIGHT 2005 ACS on STN  
 AN 1998:568743 HCAPLUS  
 DN 129:184244  
 ED Entered STN: 07 Sep 1998  
 TI Inhibition of viral or cancer gene transcription by polyamide DNA-binding ligands  
 IN Gottesfeld, Joel M.; Dervan, Peter B.; Mosier, Donald E.; Baird, Eldon E.  
 PA California Institute of Technology, USA; The Scripps Research Institute  
 SO PCT Int. Appl., 113 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 IC ICM A61K047-48  
 CC 1-5 (Pharmacology)  
 Section cross-reference(s): 63

FAN.CNT 11

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9835702	A1	19980820	WO 1998-US2444	19980211 <--
W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, US, US, US, US, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
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AU 9861517	A1	19980908	AU 1998-61517	19980211 <--
AU 749953	B2	20020704		
EP 964703	A1	19991222	EP 1998-906240	19980211 <--
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US 1997-38394P	P	19970214	<--	
US 1997-853022	A2	19970421	<--	
WO 1997-US12722	A2	19970721	<--	
US 1997-853522	A	19970508	<--	

Search done by Noble Jarrell

US 1997-853525	A	19970508	<--
US 1997-56048P	P	19970902	<--
US 1997-58338P	P	19970910	<--
WO 1998-US2444	W	19980211	<--

## CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES	
WO 9835702	ICM	A61K047-48	
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WO 9850582	ECLA	C07D207/34; C07D233/90; C07D403/14R+233+207; C07D403/14R+231+207; C07K007/02	<--
US 6660255	ECLA	A61K047/48K6	<--
AB		The invention provides polyamides suitable for modulating cellular or viral gene expression by binding to an identified target DNA sequence adjacent to the binding site of a minor groove transcription factor protein. The polyamides of the present invention are useful for the treatment of a human infected with a virus such as HIV-1. The polyamides of the present invention are also useful for the treatment of conditions, such as cancers, that result from the expression or over-expression of cellular genes, particularly oncogenes.	
ST		gene transcription inhibitor antitumor virucide	
IT		rRNA	
		RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)	
		(5 S; inhibition of viral or cancer gene transcription by polyamide DNA-binding ligands)	
IT		Proteins, specific or class	
		RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)	
		(DNA-binding, zinc finger-containing, TFIIIA, 5S rRNA binding of; inhibition of viral or cancer gene transcription by polyamide DNA-binding ligands)	
IT		Transcription factors	
		RL: BSU (Biological study, unclassified); BIOL (Biological study)	
		(Ets-1, binding sites of; inhibition of viral or cancer gene transcription by polyamide DNA-binding ligands)	
IT		Transcription factors	
		RL: BSU (Biological study, unclassified); BIOL (Biological study)	
		(LEF-1, binding sites of; inhibition of viral or cancer gene transcription by polyamide DNA-binding ligands)	
IT		Transcription factors	
		RL: BSU (Biological study, unclassified); BIOL (Biological study)	
		(TBP, binding sites of; inhibition of viral or cancer gene transcription by polyamide DNA-binding ligands)	
IT		Transcription factors	
		RL: BSU (Biological study, unclassified); BIOL (Biological study)	
		(TFIIA, binding sites of; inhibition of viral or cancer gene transcription by polyamide DNA-binding ligands)	
IT		Mammary gland	
		Mammary gland	
		Mammary gland	
		Ovary, neoplasm	
		(adenocarcinoma, inhibitors; inhibition of viral or cancer gene transcription by polyamide DNA-binding ligands)	
IT		Gene, animal	
		RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)	
		(c-erbB2; inhibition of viral or cancer gene transcription by polyamide DNA-binding ligands)	
IT		Antitumor agents	
		Antitumor agents	



- (cervix adenocarcinoma; inhibition of viral or cancer gene transcription by polyamide DNA-binding ligands)
- IT Uterus, neoplasm  
 Uterus, neoplasm  
 (cervix, adenocarcinoma, inhibitors; inhibition of viral or cancer gene transcription by polyamide DNA-binding ligands)
- IT Antitumor agents  
 Antitumor agents  
 (endometrium adenocarcinoma; inhibition of viral or cancer gene transcription by polyamide DNA-binding ligands)
- IT Uterus, neoplasm  
 Uterus, neoplasm  
 (endometrium, adenocarcinoma, inhibitors; inhibition of viral or cancer gene transcription by polyamide DNA-binding ligands)
- IT Gene  
 (expression; inhibition of viral or cancer gene transcription by polyamide DNA-binding ligands)
- IT Antibacterial agents  
 Antiviral agents  
 Bacteria (Eubacteria)  
 Fungi  
 Fungicides  
 Human immunodeficiency virus 1  
 Protozoa  
 Protozoacides  
 Retroviridae  
 Virus  
 (inhibition of viral or cancer gene transcription by polyamide DNA-binding ligands)
- IT Polyamides, biological studies  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (inhibition of viral or cancer gene transcription by polyamide DNA-binding ligands)
- IT Transcription, genetic  
 (inhibitors of; inhibition of viral or cancer gene transcription by polyamide DNA-binding ligands)
- IT Antitumor agents  
 Antitumor agents  
 Antitumor agents  
 (mammary gland adenocarcinoma; inhibition of viral or cancer gene transcription by polyamide DNA-binding ligands)
- IT Transcription factors  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (minor-groove, binding sites of; inhibition of viral or cancer gene transcription by polyamide DNA-binding ligands)
- IT Oviduct  
 (neoplasm, adenocarcinoma, inhibitors; inhibition of viral or cancer gene transcription by polyamide DNA-binding ligands)
- IT Antitumor agents  
 (ovary adenocarcinoma; inhibition of viral or cancer gene transcription by polyamide DNA-binding ligands)
- IT Drug delivery systems  
 (parenterals; inhibition of viral or cancer gene transcription by polyamide DNA-binding ligands)
- IT DNA sequences  
 (targets; inhibition of viral or cancer gene transcription by polyamide DNA-binding ligands)
- IT 180530-17-0 206128-28-1 211860-88-7 211860-89-8  
 211860-90-1 211860-91-2

RL: BPR (Biological process); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(inhibition of viral or cancer gene transcription by polyamide DNA-binding ligands)

IT 56-12-2, Gaba, biological studies 109-55-7 305-62-4

RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(inhibition of viral or cancer gene transcription by polyamide DNA-binding ligands)

IT 107-95-9, .beta.-Alanine

RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PROC (Process); USES (Uses)

(substitution by; inhibition of viral or cancer gene transcription by polyamide DNA-binding ligands)

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Cho, J; PROC NATL ACAD SCI U S A 1995, V92(22), P10389 HCAPLUS
- (2) Genelabs Tech Inc; WO 9414980 A 1994 HCAPLUS
- (3) Gottesfeld, J; NATURE (LONDON) 1997, V387(6629), P202 HCAPLUS
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- (6) Swalley, S; CHEM--EUR J 1997, V3(10), P1600 HCAPLUS
- (7) Trauger, J; CHEM BIOL 1996, V3(5), P369 HCAPLUS
- (8) Trauger, J; NATURE (LONDON) 1996, V382(6591), P559 HCAPLUS
- (9) Turner, J; J AM CHEM SOC 1997, V119(33), P7636 HCAPLUS
- (10) White, S; NATURE (LONDON) 1998, V391(6666), P468 HCAPLUS

IT 180530-17-0 206128-28-1

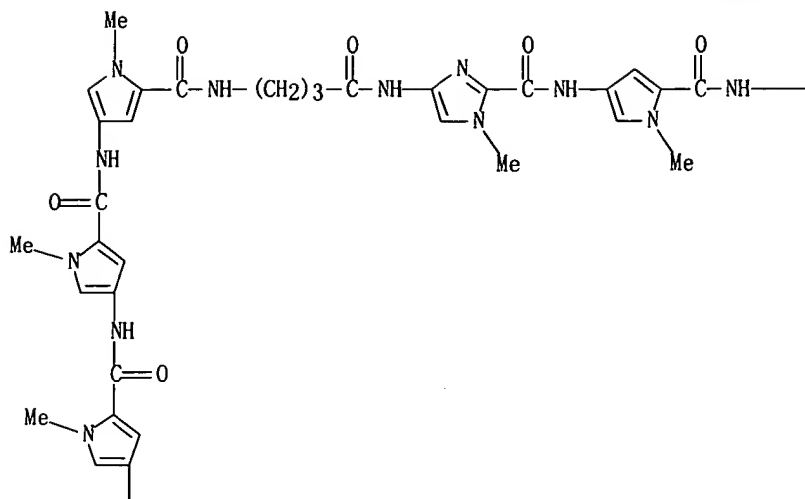
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(inhibition of viral or cancer gene transcription by polyamide DNA-binding ligands)

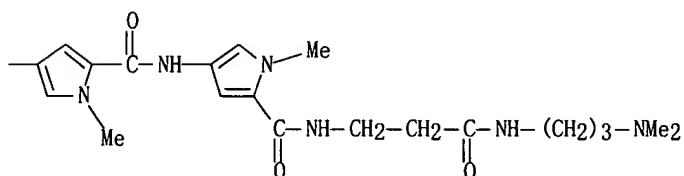
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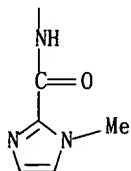
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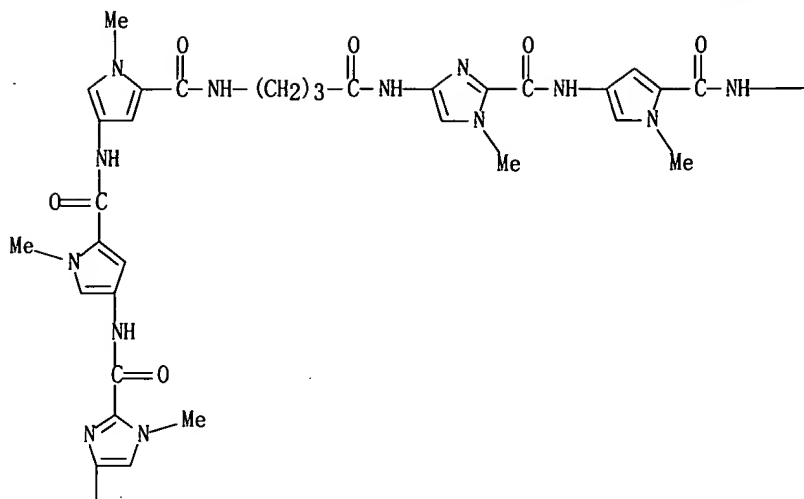
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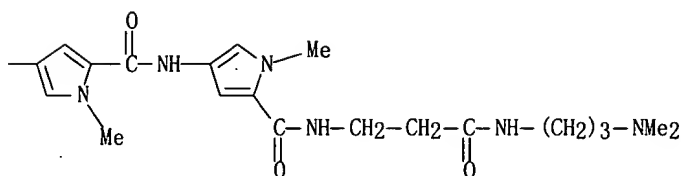
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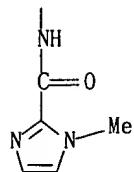
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PAGE 2-A



L42 ANSWER 14 OF 17 HCAPLUS COPYRIGHT 2005 ACS on STN  
 AN 1997:579701 HCAPLUS  
 DN 127:263060  
 ED Entered STN: 11 Sep 1997  
 TI Preparation of polypyrrole and polyimidazole carboxamide building blocks  
 for solid-phase synthesis of polyamides  
 IN Dervan, Peter B.; Baird, Eldon E.  
 PA California Institute of Technology, USA  
 SO PCT Int. Appl., 166 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 IC ICM C07D207-34  
 ICS C07D233-90  
 CC 34-3 (Amino Acids, Peptides, and Proteins)

Section cross-reference(s): 6, 27, 28, 33

FAN.CNT 11

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9730975	A2	19970828	WO 1997-US3332	19970220 <--
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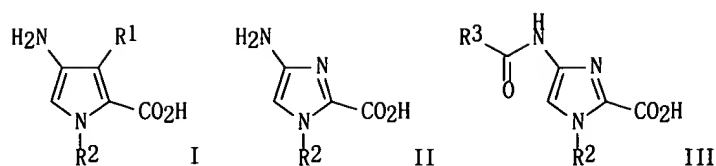
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## CLASS

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	ICS	C07D233-90
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US 6545162	ECLA	C07D207/34; C07D233/90; C07D403/14R+231+207; C07D403/14R+233+207; C07K005/06H2; C07K005/06H2C; C07K007/04; C08G069/00; C12Q001/68B12 <--
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OS MARPAT 127:263060  
GI



- AB The present invention describes a novel method for the solid phase synthesis of polyamides containing imidazole- and pyrrolecaboxamides. The polyamides are prepared on a solid support from aromatic aminocarboxylic acids I and II ( $R_1 = H, Me, OH, NH_2, Cl, CF_3$ ;  $R_2 = C1-10$  alkyl,  $C1-10$  alkenyl,  $C1-10$  alkynyl) and dimers III ( $R_3 =$  pyrrole amino acid, imidazole amino acid, aromatic amino acid, aliphatic amino acid, or any modification thereof) with high stepwise coupling yields ( $>99\%$ ), providing milligram quantities of highly pure polyamides. The present invention also describes the synthesis of analogs of the natural products netropsin and distamycin A, two antiviral antibiotics. The present invention also describes a novel method for the solid phase synthesis of imidazole- and pyrrolecaboxamide polyamide-oligonucleotide conjugates. This methodol. will greatly increase both the complexity and quantity of minor-groove binding polyamides and minor-groove binding polyamide-oligonucleotide conjugates which can be synthesized and tested. Thus, polyamides such as  $Ac-Im-Im-Py-NH(CH_2)_3CO-Py-Py-Py-Gly-NH(CH_2)_3NMe_2$  ( $Im =$  4-amino-1-methylimidazole-2-carboxylic acid,  $Py =$  4-amino-1-methylpyrrole-2-carboxylic acid) were prepared by standard solid-phase methods on a 4-(oxymethyl)phenylacetamidomethyl (PAM) resin using N-protected building blocks I-III and resin cleavage with 3-(dimethylamino)propylamine. Oligonucleotide-polyamide conjugates were prepared similarly.
- ST polypyrrole building block prepn; polyimidazole building block prepn; aminopyrrolecaboxylic acid protected prepn coupling; aminoimidazolecarboxylic acid protected prepn coupling; imidazole pyrrole polyamide solid phase prepn; oligonucleotide polyamide conjugate solid phase prepn; DNA polyamide conjugate solid phase prepn
- IT Oligonucleotides  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (conjugates, polyamide; preparation of polypyrrole and polyimidazole carboxamide building blocks for solid-phase synthesis of polyamides as DNA minor groove binding agents)
- IT DNA  
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
 (conjugates; preparation of polypyrrole and polyimidazole carboxamide building blocks for solid-phase synthesis of polyamides as DNA minor groove binding agents)
- IT Solid phase synthesis  
 (preparation of polypyrrole and polyimidazole carboxamide building blocks for solid-phase synthesis of polyamides as DNA minor groove binding agents)
- IT Polyamides, preparation  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of polypyrrole and polyimidazole carboxamide building blocks for solid-phase synthesis of polyamides as DNA minor groove binding agents)
- IT 196003-78-8P 196003-79-9P 196003-80-2P  
 196003-81-3P 196003-82-4P 196003-83-5P  
 196003-84-6P 196003-85-7P 196003-86-8P  
 196003-87-9P 196003-88-0P 196003-89-1P  
 196003-90-4P 196003-91-5P 196003-92-6P  
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of polypyrrole and polyimidazole carboxamide building blocks

for solid-phase synthesis of polyamides as DNA minor groove binding agents)

- IT 70-11-1, .alpha.-Bromoacetophenone 96-54-8, N-Methylpyrrole 105-83-9  
 107-15-3, 1,2-Ethanediamine, reactions 109-55-7, 3-  
 (Dimethylamino)propylamine 459-73-4, Glycine ethyl ester 488-11-9,  
 Mucobromic acid 616-14-8, 1-Iodo-2-methylbutane 616-47-7,  
 N-Methylimidazole 5437-45-6, Benzyl bromoacetate 5448-16-8  
 6232-88-8, 4-(Bromomethyl)benzoic acid 23911-25-3 57294-38-9  
 65171-82-6 81329-81-9, EDTA monoanhydride 195387-10-1 195387-58-7  
 195387-66-7

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of polypyrrole and polyimidazole carboxamide building blocks  
 for solid-phase synthesis of polyamides as DNA minor groove binding  
 agents)

- IT 13138-74-4P, Methyl 4-nitropyrrole-2-carboxylate 13138-76-6P  
 30148-21-1P, Ethyl 1-methylimidazole-2-carboxylate 34461-00-2P, Sodium  
 nitromalondialdehyde 35302-72-8P, 2-Trichloroacetylpyrrole 65171-90-6P  
 65171-98-4P 77716-11-1P 77716-13-3P 77716-16-6P 109012-23-9P  
 113100-79-1P 120122-47-6P 128293-64-1P 155815-95-5P 177937-13-2P  
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 195387-62-3P 195387-63-4P 195387-64-5P 195631-53-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)

(preparation of polypyrrole and polyimidazole carboxamide building blocks  
 for solid-phase synthesis of polyamides as DNA minor groove binding  
 agents)

- IT 636-47-5DP, Distamycin A, analogs 1438-30-8DP, Netropsin, analogs  
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 195387-98-5P 195631-51-7P 195631-52-8P 195631-55-1P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of polypyrrole and polyimidazole carboxamide building blocks  
 for solid-phase synthesis of polyamides as DNA minor groove binding  
 agents)

- IT 196003-78-8P 196003-79-9P 196003-80-2P  
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 196003-90-4P 196003-91-5P 196003-92-6P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)

(preparation of polypyrrole and polyimidazole carboxamide building blocks  
 for solid-phase synthesis of polyamides as DNA minor groove binding  
 agents)

- RN 196003-78-8 HCAPLUS

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 with N-[5-[[[5-[[[2-[[[5-[[[5-[[[3-(dimethylamino)propyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-imidazole-2-carboxamide (1:2) (9CI) (CA INDEX NAME)



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CRN 195538-75-1

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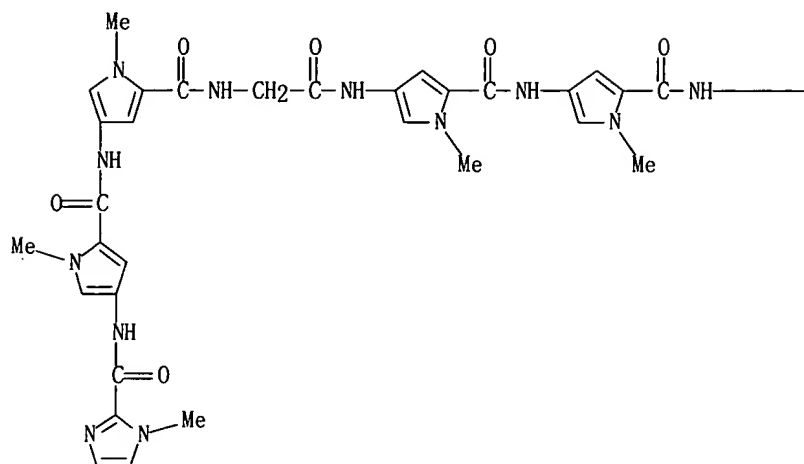
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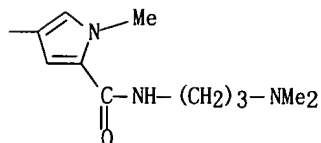
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PAGE 1-A



PAGE 1-B



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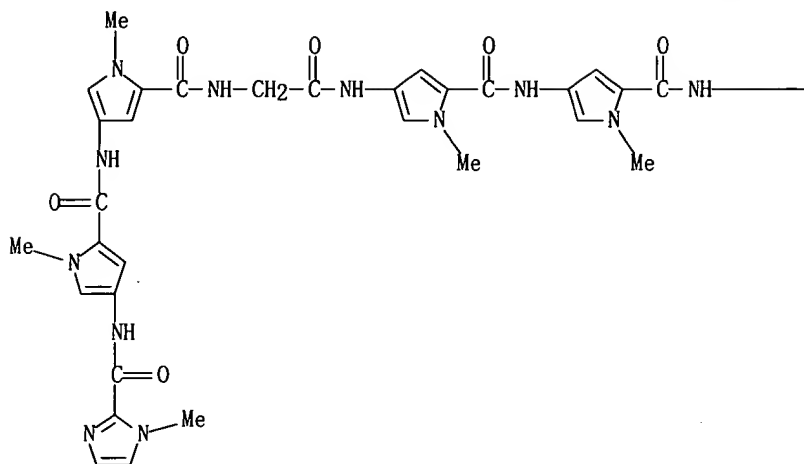
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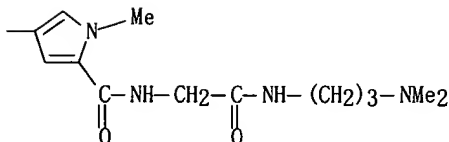
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PAGE 1-B



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CMF Unspecified

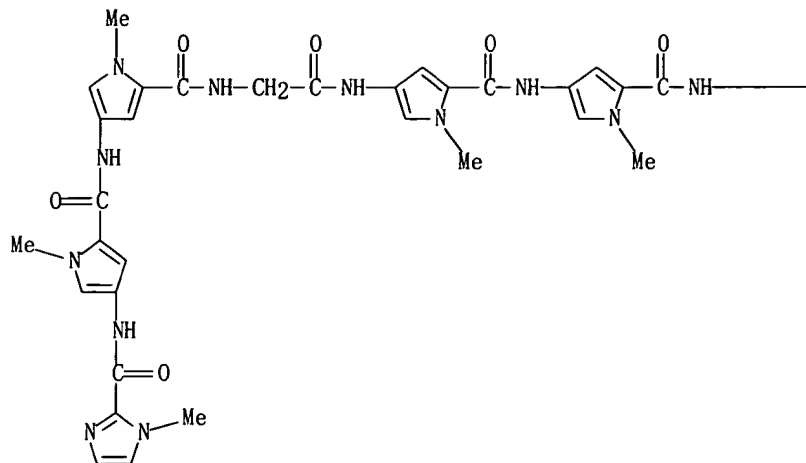
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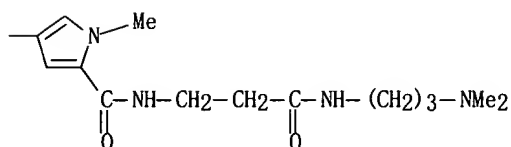
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CMF C45 H56 N16 O8

PAGE 1-A



PAGE 1-B



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with N-[5-[[[5-[[[2-[[5-[[[5-[[[3-(dimethylamino)propyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]-2-oxoethyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]-1-methyl-1H-imidazole-2-carboxamide (1:2) (9CI) (CA INDEX NAME)

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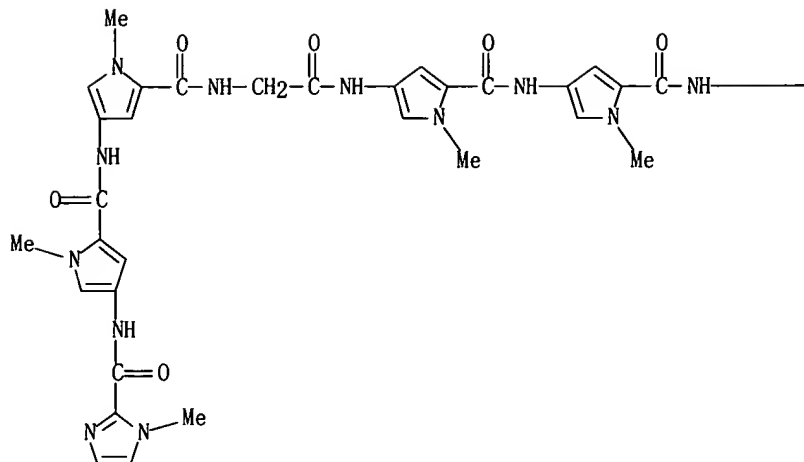
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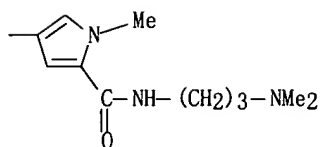
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CMF C42 H51 N15 O7

PAGE 1-A



PAGE 1-B



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CRN 195538-76-2

CMF Unspecified

CCI MAN

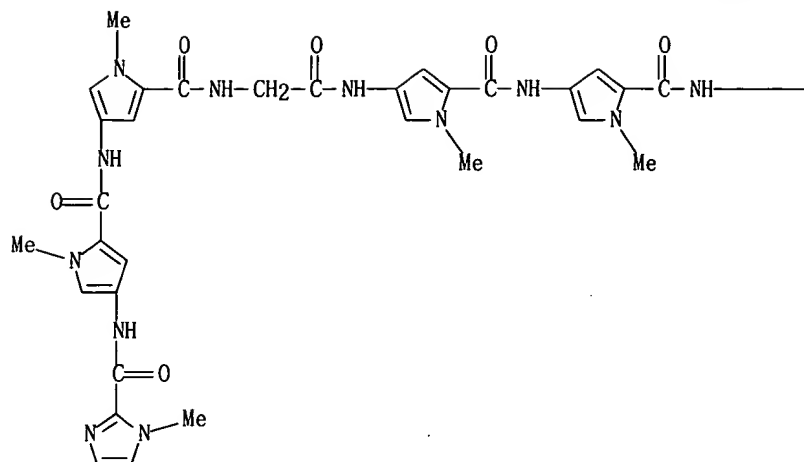
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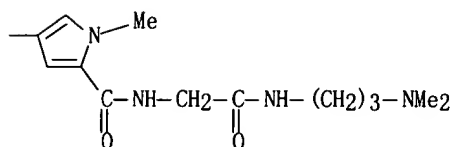
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CMF C44 H54 N16 O8

PAGE 1-A



PAGE 1-B



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with N-[5-[[[5-[[[2-[[5-[[[5-[[[5-[[[3-[[3-(dimethylamino)propyl]amino]-3-oxopropyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]-2-oxoethyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]-1-methyl-1H-imidazole-2-carboxamide (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 195538-76-2

CMF Unspecified

CCI MAN

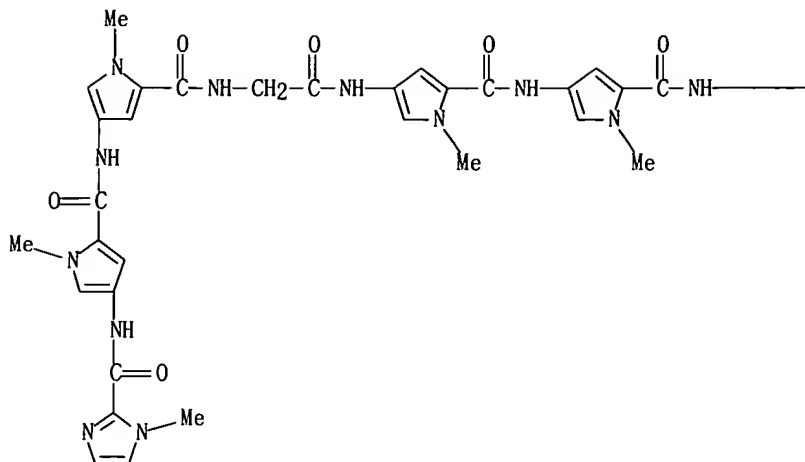
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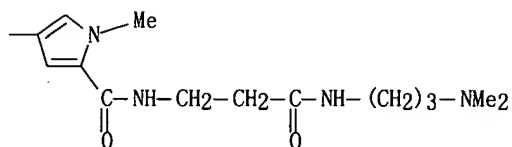
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CMF C45 H56 N16 O8

PAGE 1-A



PAGE 1-B



RN 196003-84-6 HCAPLUS

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CM 1

CRN 195538-77-3

CMF Unspecified

CCI MAN

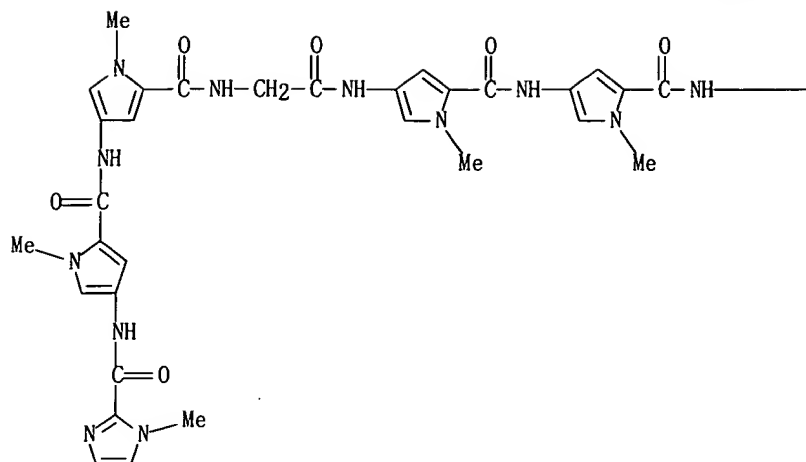
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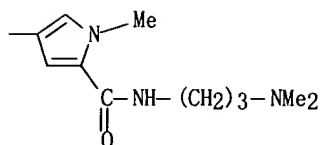
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CMF C42 H51 N15 O7

PAGE 1-A



PAGE 1-B



RN 196003-85-7 HCAPLUS

CN DNA, d(T-G-T-T-A-A-C-A), double-stranded complementary, compd. with  
 N-[5-[[[5-[[[2-[[5-[[[5-[[[2-[[3-(dimethylamino)propyl]amino]-2-oxoethyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]-2-oxoethyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]-1-methyl-1H-imidazole-2-carboxamide (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 195538-77-3

CMF Unspecified

CCI MAN

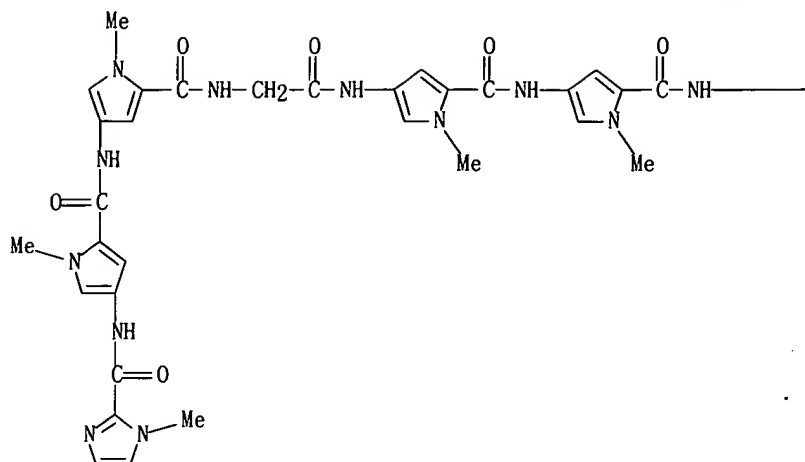
\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

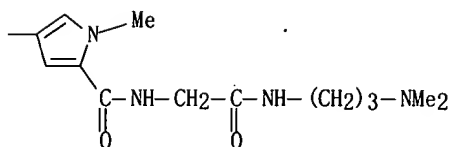
CRN 195387-75-8

CMF C44 H54 N16 O8

PAGE 1-A



PAGE 1-B



RN 196003-86-8 HCAPLUS

CN DNA, d(T-G-T-T-A-A-C-A), double-stranded complementary, compd. with  
 N-[5-[[[5-[[[2-[[5-[[[5-[[[5-[[[3-[[3-(dimethylamino)propyl]amino]-3-oxopropyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]-2-oxoethyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]-1-methyl-1H-imidazole-2-carboxamide (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 195538-77-3

CMF Unspecified

CCI MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

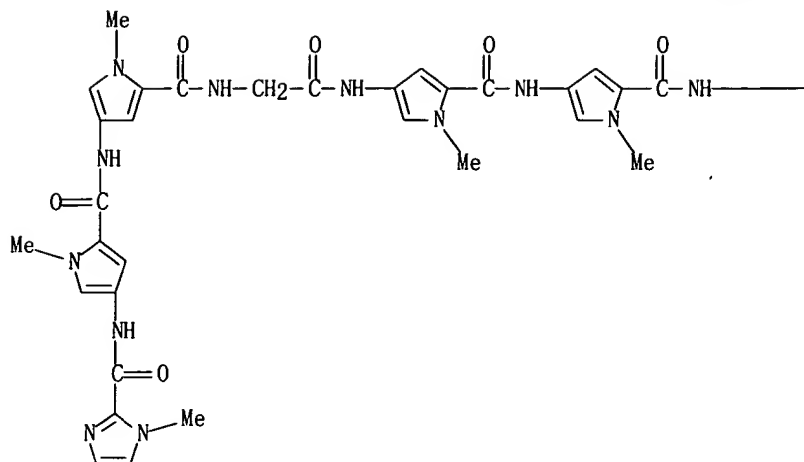
CM 2

CRN 195387-96-3

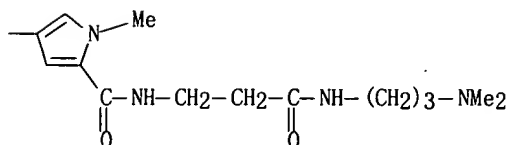
CMF C45 H56 N16 O8



PAGE 1-A



PAGE 1-B



RN 196003-87-9 HCAPLUS

CN DNA, d(C-G-T-T-T-A-C-A), double-stranded complementary, compd. with  
 N-[5-[[[5-[[[2-[[5-[[[5-[[[5-[[[3-(dimethylamino)propyl]amino]carbonyl]-1-  
 methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-  
 yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]-2-  
 oxoethyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-  
 1H-pyrrol-3-yl]-1-methyl-1H-imidazole-2-carboxamide (1:2) (9CI) (CA INDEX  
 NAME)

CM 1

CRN 195538-78-4

CMF Unspecified

CCI MAN

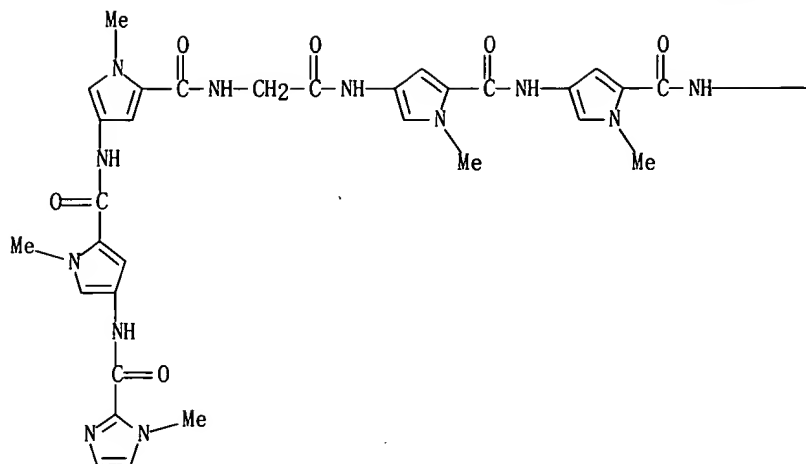
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CM 2

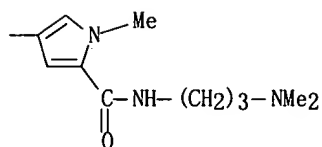
CRN 160030-20-6

CMF C42 H51 N15 O7

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RN 196003-88-0 HCAPLUS

CN DNA, d(C-G-T-T-T-A-C-A), double-stranded complementary, compd. with  
 N-[5-[[[5-[[[2-[[5-[[[5-[[[2-[[3-(dimethylamino)propyl]amino]-2-oxoethyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]-2-oxoethyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]-1-methyl-1H-imidazole-2-carboxamide (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 195538-78-4

CMF Unspecified

CCI MAN

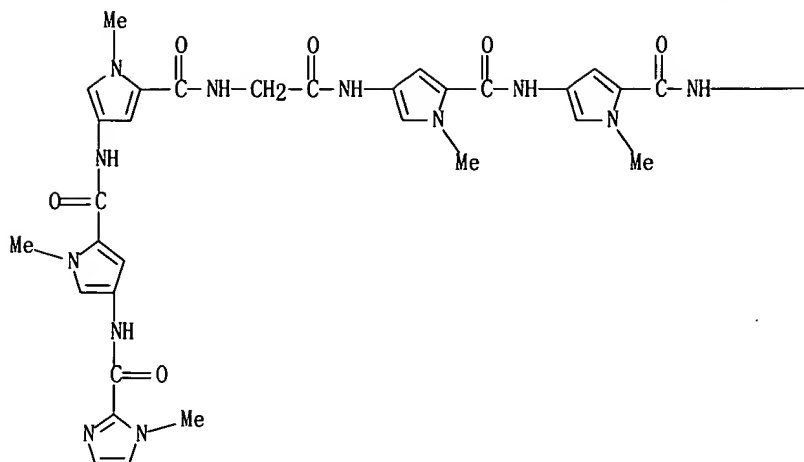
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CM 2

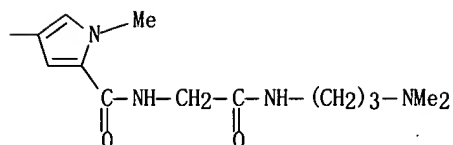
CRN 195387-75-8

CMF C44 H54 N16 O8

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RN 196003-89-1 HCAPLUS

CN DNA, d(C-G-T-T-T-A-C-A), double-stranded complementary, compd. with  
 N-[5-[[[5-[[[2-[[5-[[[5-[[[3-[[3-(dimethylamino)propyl]amino]-3-oxopropyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]-2-oxoethyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]-1-methyl-1H-imidazole-2-carboxamide (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 195538-78-4

CMF Unspecified

CCI MAN

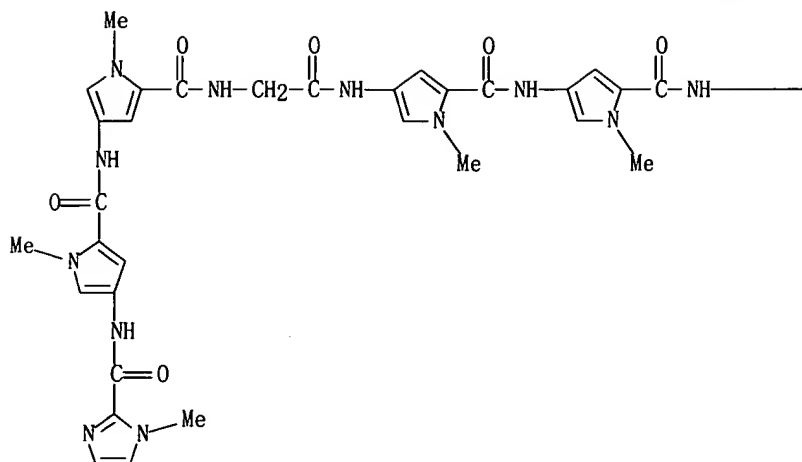
\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

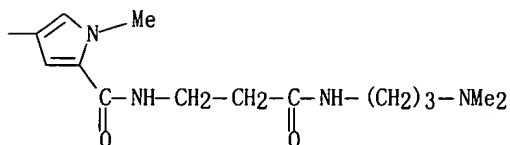
CRN 195387-96-3

CMF C45 H56 N16 O8

PAGE 1-A



PAGE 1-B



RN 196003-90-4 HCAPLUS

CN DNA, d(C-T-T-G-C-A-G-C-A-C-A), double-stranded complementary, compd. with  
 N-[5-[[[5-[[[2-[[5-[[[5-[[[3-(dimethylamino)propyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]-2-oxoethyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]-1-methyl-1H-imidazole-2-carboxamide (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 195538-79-5

CMF Unspecified

CCI MAN

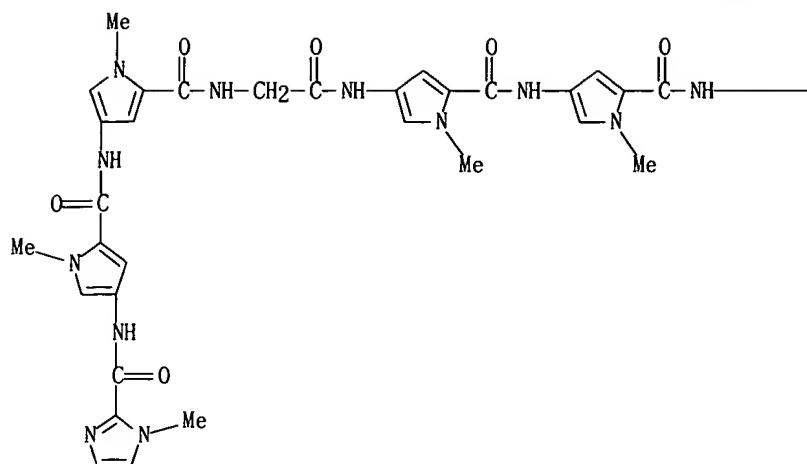
\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

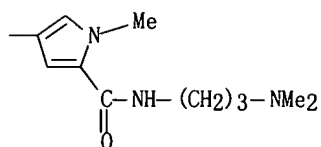
CRN 160030-20-6

CMF C42 H51 N15 O7

PAGE 1-A



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RN 196003-91-5 HCAPLUS

CN DNA, d(C-T-T-G-C-A-G-C-A-C-A), double-stranded complementary, compd. with  
 N-[5-[[[5-[[[2-[[5-[[[5-[[[5-[[[2-[[3-(dimethylamino)propyl]amino]-2-oxoethyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]-2-oxoethyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]-1-methyl-1H-imidazole-2-carboxamide (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 19538-79-5

CMF Unspecified

CCI MAN

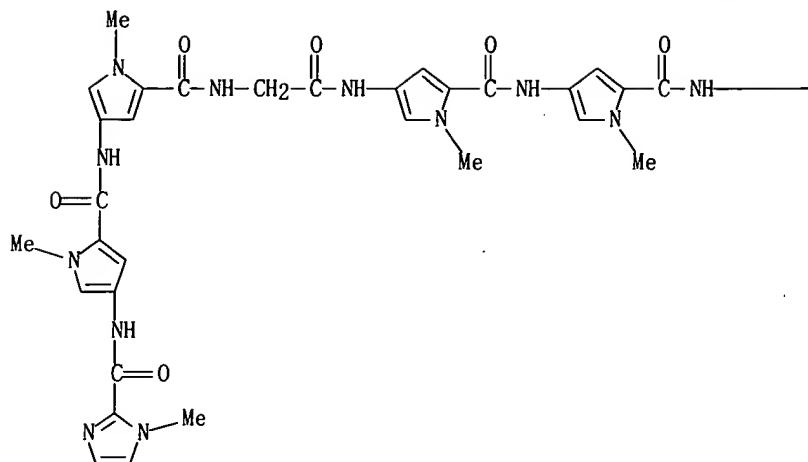
\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

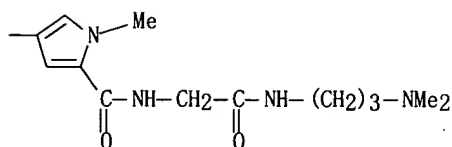
CRN 195387-75-8

CMF C44 H54 N16 O8

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RN 196003-92-6 HCAPLUS

CN DNA, d(C-T-T-G-C-A-G-C-A-C-A), double-stranded complementary, compd. with  
 N-[5-[[[5-[[[2-[[5-[[[5-[[[5-[[[3-[[3-(dimethylamino)propyl]amino]-3-oxopropyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]-2-oxoethyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]-1-methyl-1H-imidazole-2-carboxamide (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 19538-79-5

CMF Unspecified

CCI MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

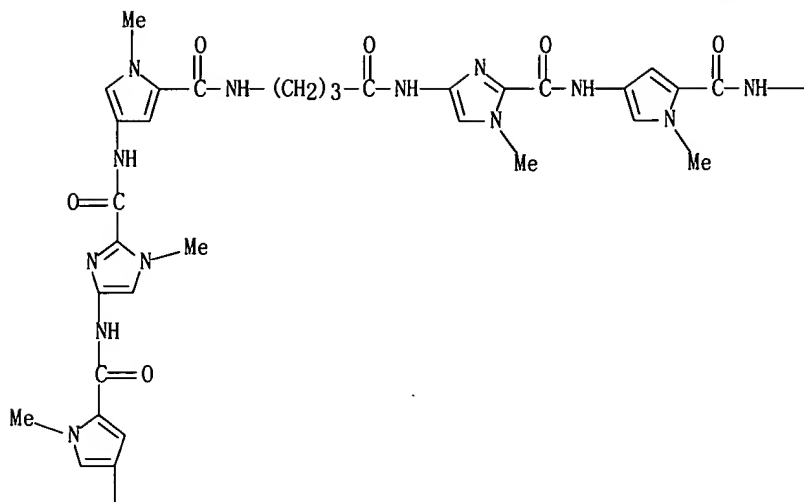
CM 2

CRN 195387-96-3

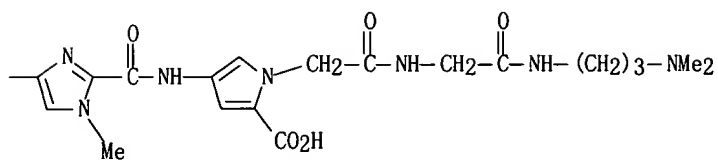
CMF C45 H56 N16 O8



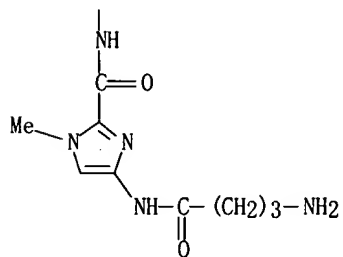
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IT 195387-65-6P 195387-68-9P 195387-69-0P  
 195387-71-4P 195387-75-8P 195387-77-0P  
 195387-78-1P 195387-80-5P 195387-83-8P  
 195387-85-0P 195387-87-2P 195387-89-4P  
 195387-91-8P 195387-92-9P 195387-93-0P  
 195387-94-1P 195387-95-2P 195387-96-3P  
 195387-98-5P

RL: SPN (Synthetic preparation); PREP (Preparation)

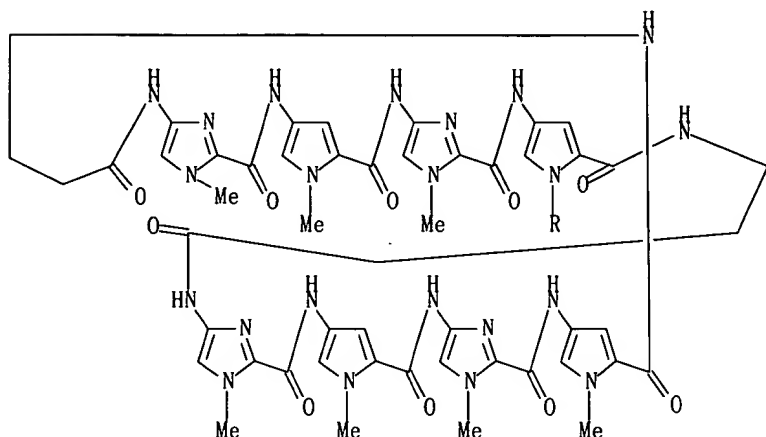
(preparation of polypyrrole and polyimidazole carboxamide building blocks  
 for solid-phase synthesis of polyamides as DNA minor groove binding  
 agents)

RN 195387-65-6 HCAPLUS

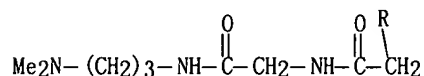
CN 2, 5, 8, 11, 14, 17, 20, 25, 28, 31, 34, 37, 40, 43, 46, 49, 54, 57, 60, 62, 64, 66-  
 Docosaazanacyclo[54.2.1.14,7.110,13.116,19.127,30.133,36.139,42.145,48]h



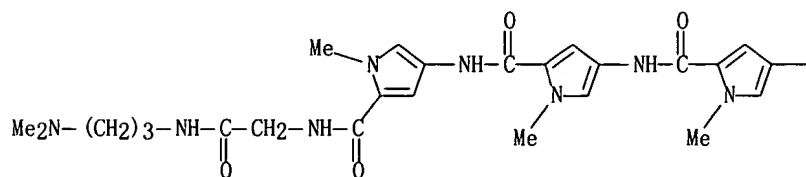
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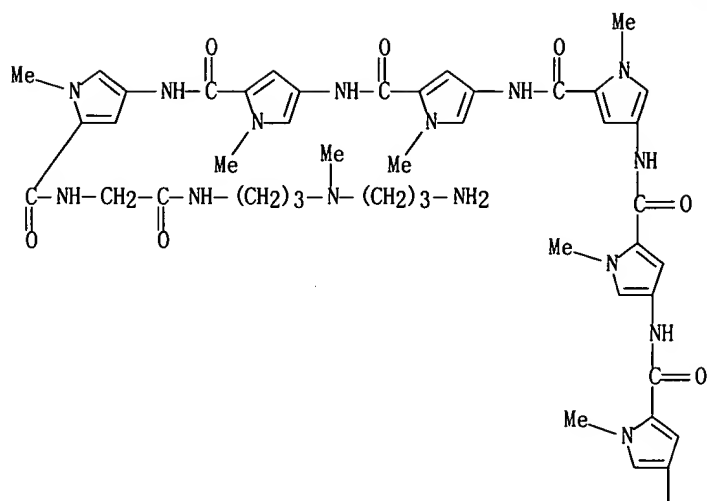
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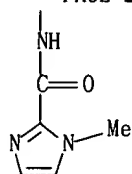




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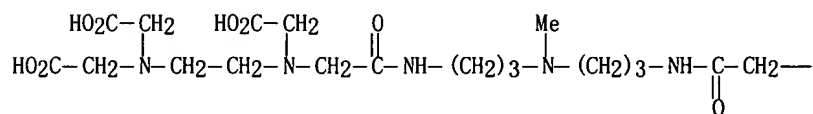
PAGE 2-A



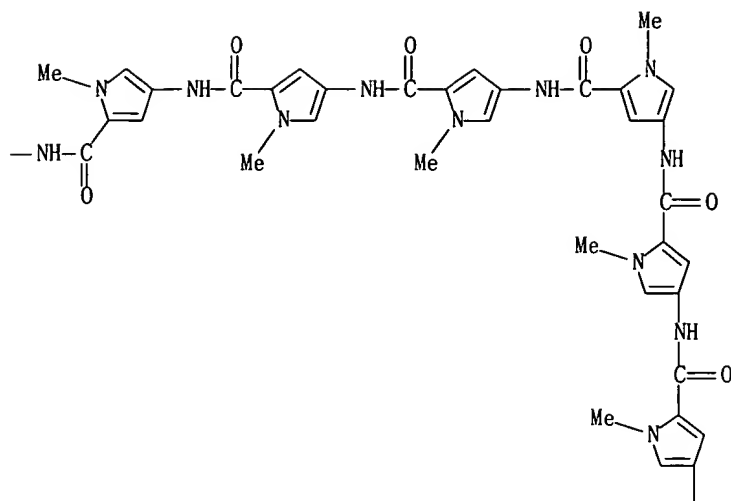
RN 195387-71-4 HCAPLUS

CN    2, 5, 9, 13, 16, 19-Hexaazaheneicosan-21-oic acid, 16, 19-bis(carboxymethyl)-9-methyl-1-[1-methyl-4-[[[1-methyl-4-[[[1-methyl-4-[[[1-methyl-4-[[[1-methyl-4-[[[1-methyl-4-[(1-methyl-1H-imidazol-2-yl)carbonyl]amino]-1H-pyrrol-2-yl]carbonyl]amino]-1H-pyrrol-2-yl]carbonyl]amino]-1H-pyrrol-2-yl]carbonyl]amino]-1H-pyrrol-2-yl]carbonyl]amino]-1H-pyrrrol-2-yl]-1, 4, 14-trioxo- (9CI)    (CA INDEX NAME)

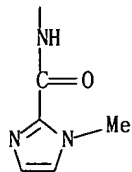
PAGE 1-A



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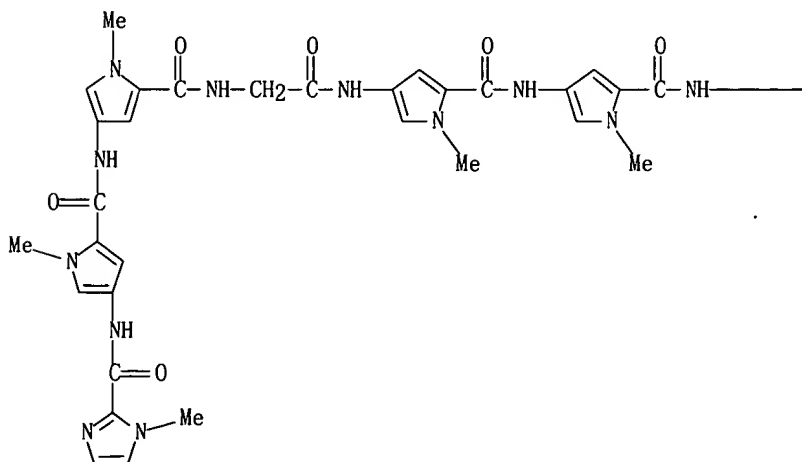
PAGE 2-B



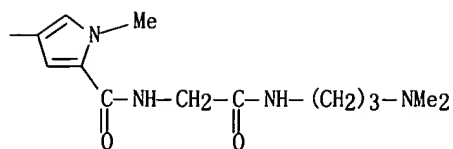
RN 195387-75-8 HCAPLUS

CN 1H-Imidazole-2-carboxamide, N-[5-[[[5-[[[2-[[5-[[[5-[[[5-[[[2-[[3-(dimethylamino)propyl]amino]-2-oxoethyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]-2-oxoethyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]-1-methyl- (9CI) (CA INDEX NAME)

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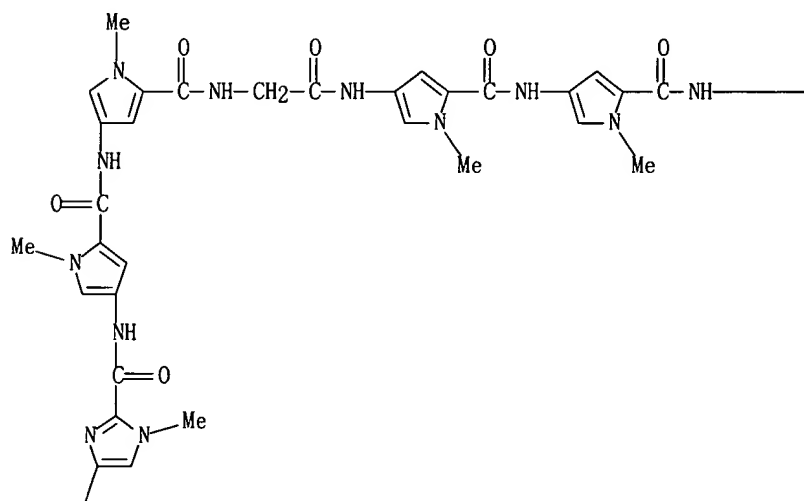
PAGE 1-B



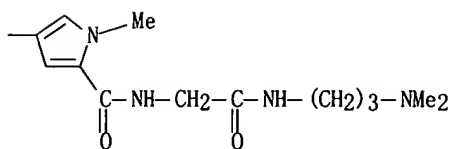
RN 195387-77-0 HCAPLUS

CN 1H-imidazole-2-carboxamide, 4-(acetylamino)-N-[5-[[[5-[[[2-[[5-[[[5-[[[5-[[[2-[[3-(dimethylamino)propyl]amino]-2-oxoethyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]-2-oxoethyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]-1-methyl- (9CI) (CA INDEX NAME)

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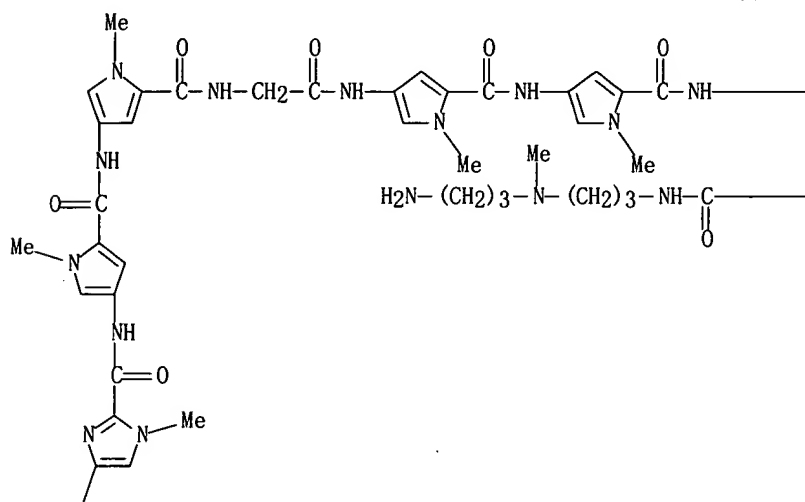
PAGE 2-A

AcNH

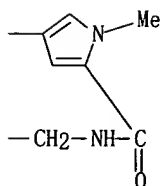
RN 195387-78-1 HCAPLUS

CN 1H-Imidazole-2-carboxamide, 4-(acetylamino)-N-[5-[[[5-[[[2-[[5-[[[5-[[[5-[[[2-[[3-[(3-aminopropyl)methylamino]propyl]amino]-2-oxoethyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]-2-oxoethyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]-1-methyl- (9CI) (CA INDEX NAME)

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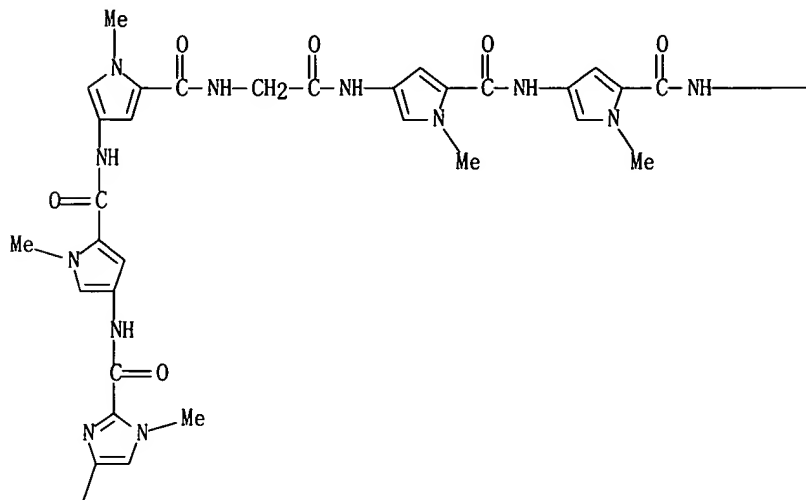
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RN 195387-80-5 HCAPLUS

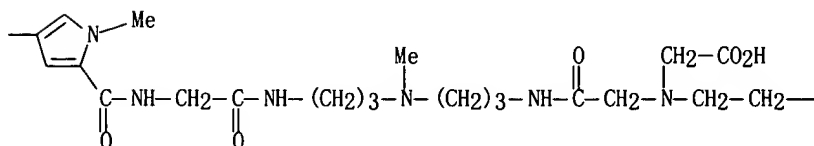
CN Glycinamide, 4-[[[4-[[[4-[[[4-[[[4-(acetylamino)-1-methyl-1H-imidazol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]acetyl]amino]-1-methyl-1H-pyrrol-2-

yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-2,3,4,5-tetrahydro-1-methylprolyl-N-[15-carboxy-11,14-bis(carboxymethyl)-4-methyl-9-oxo-4,8,11,14-tetraazapentadec-1-yl]- (9CI) (CA INDEX NAME)

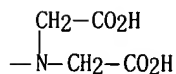
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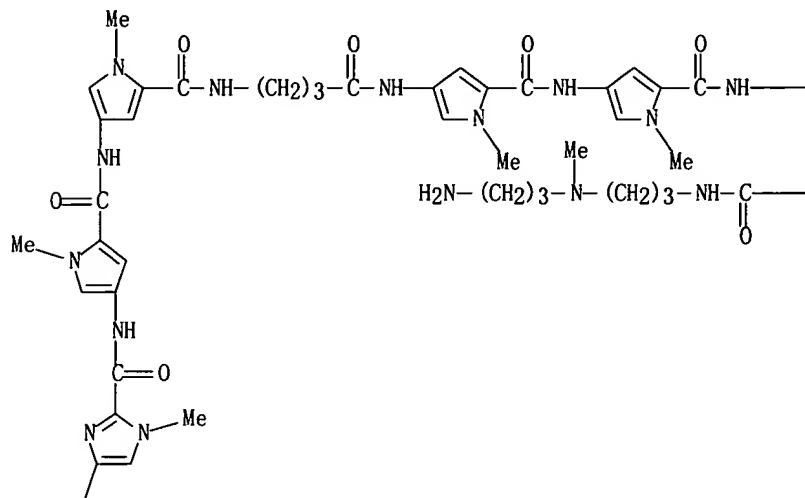


RN 195387-83-8 HCAPLUS

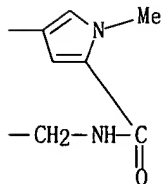
CN 1H-Imidazole-2-carboxamide, 4-(acetylamino)-N-[5-[[[5-[[[4-[[5-[[[5-[[[5-[[[2-[[3-[[3-aminopropyl)methylamino]propyl]amino]-2-oxoethyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]-4-

oxobutyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]-1-methyl- (9CI) (CA INDEX NAME)

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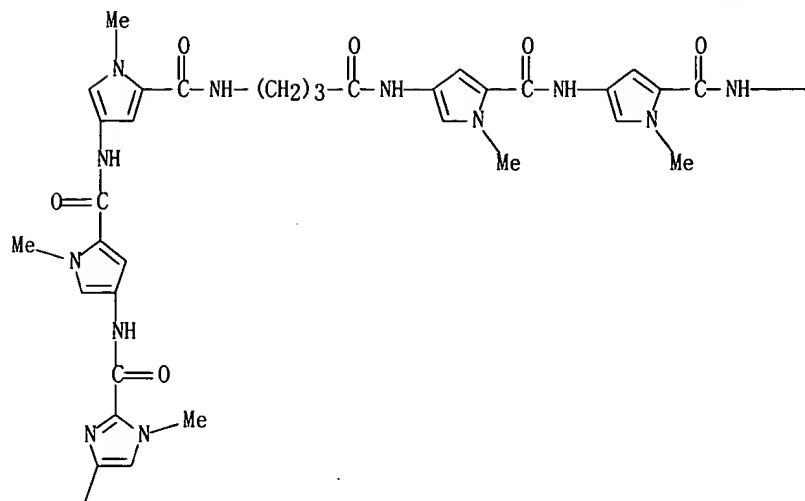
AcNH

RN 195387-85-0 HCAPLUS

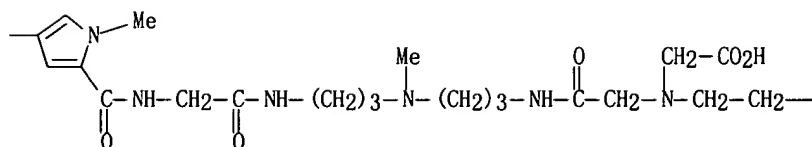
CN Glycinamide, 4-[[[4-[[[4-[[[4-[[[4-[[[4-(acetylamino)-1-methyl-1H-imidazol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-oxobutyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-1-methyl-1H-pyrrol-2-yl]carbonyl]amino]-2, 3, 4, 5-tetradehydro-1-methylprolyl-N-[15-carboxy-11, 14-bis(carboxymethyl)-4-methyl-9-oxo-4, 8, 11, 14-tetraazapentadec-1-yl]- (9CI) (CA INDEX NAME)



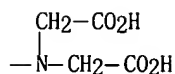
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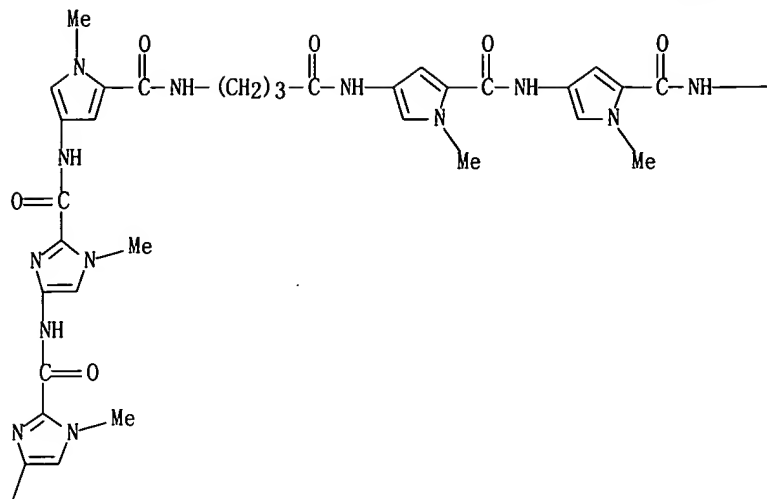
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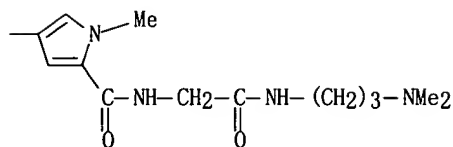
RN 195387-87-2 HCAPLUS

CN 1H-imidazole-2-carboxamide, 4-(acetylamino)-N-[2-[[[5-[[[4-[[[5-[[[5-[[[5-[[[2-[[3-(dimethylamino)propyl]amino]-2-oxoethyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]-4-oxobutyl]amino]carbonyl]-1-methyl-1H-pyrrol-3-yl]amino]carbonyl]-1-methyl-1H-imidazol-4-yl]-1-methyl- (9CI) (CA INDEX NAME)

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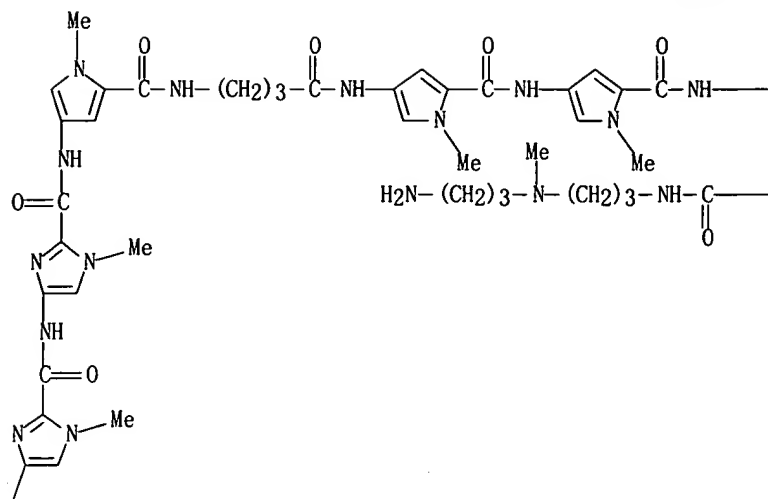
PAGE 2-A

AcNH

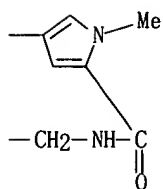
RN 195387-89-4 HCAPLUS

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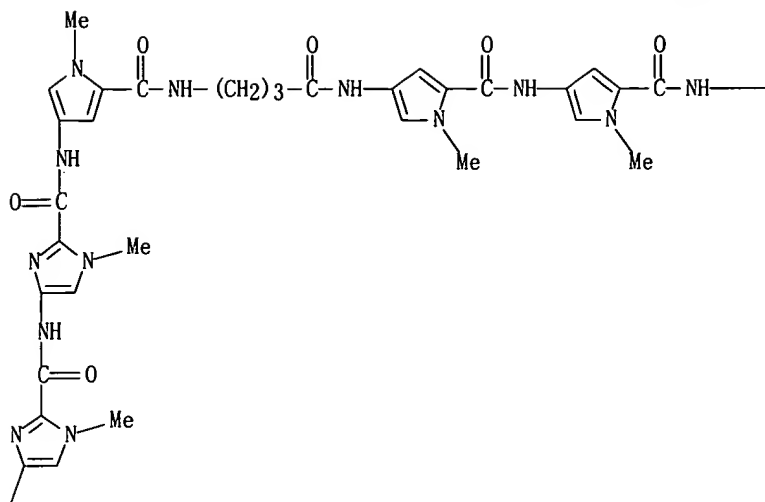
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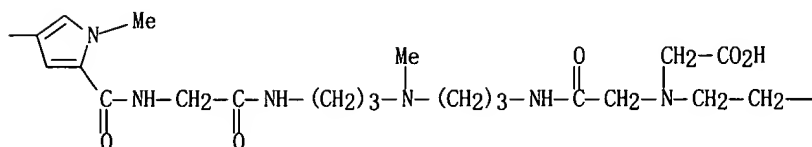
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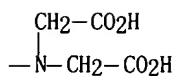
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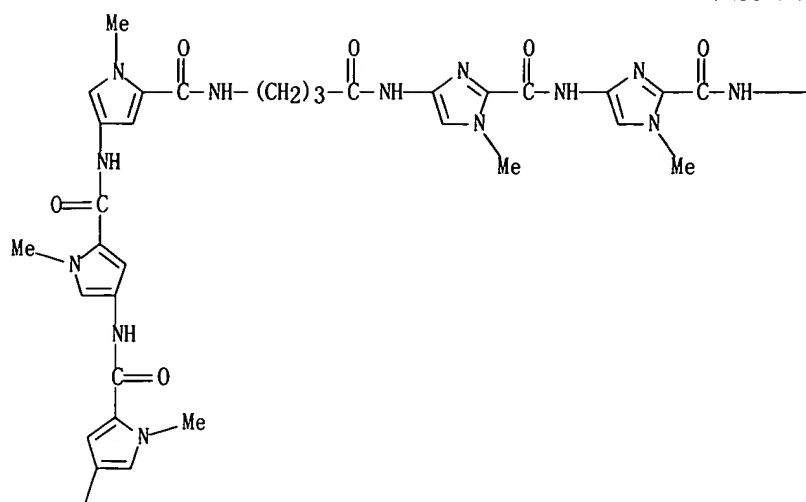


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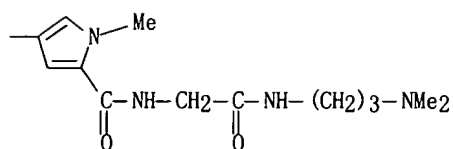


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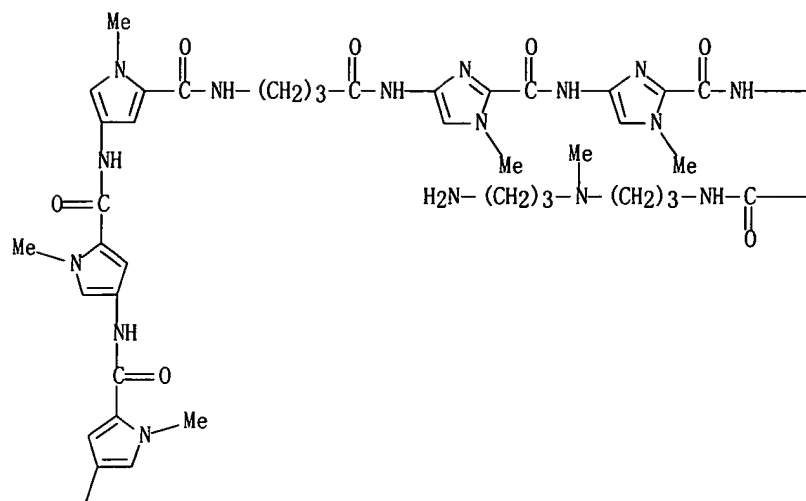
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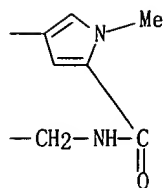
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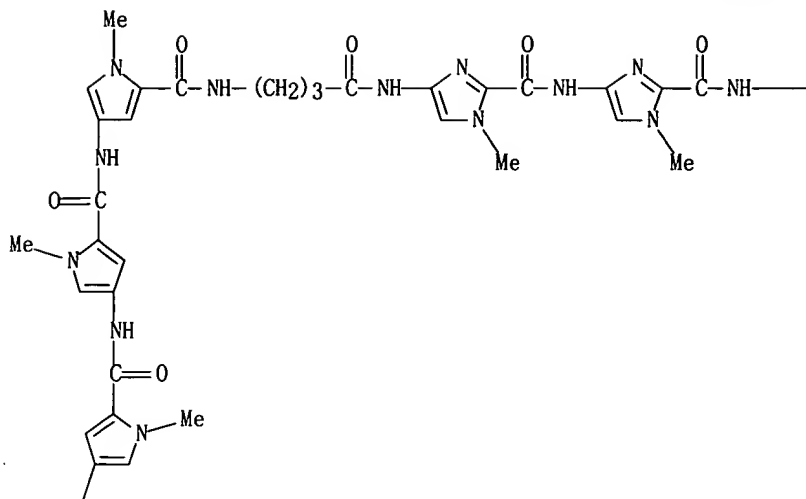
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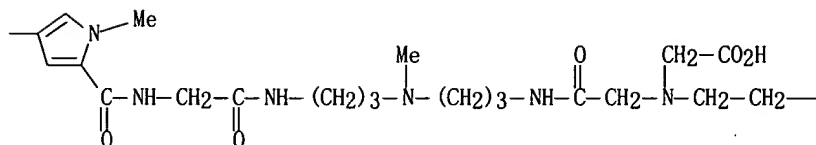
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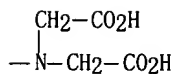
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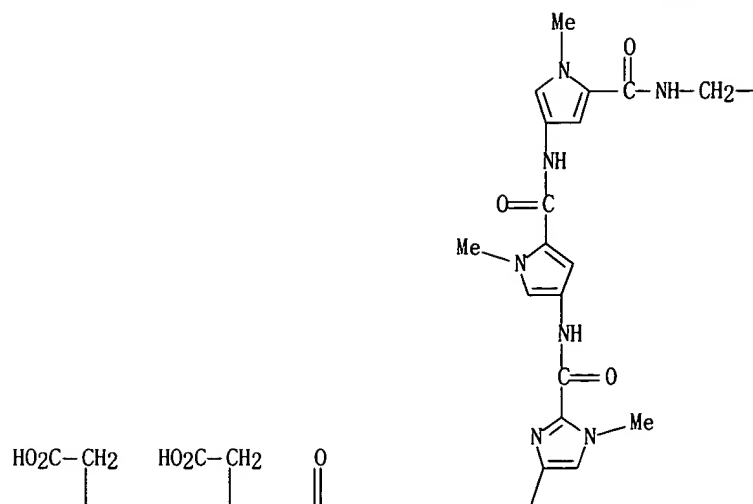
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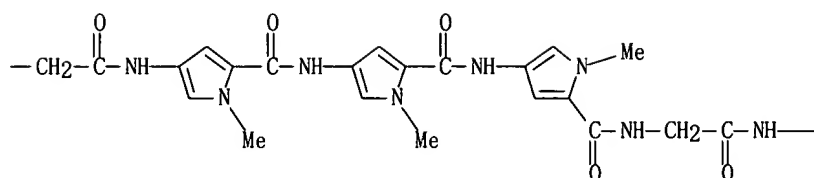
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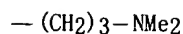
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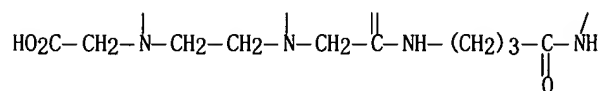
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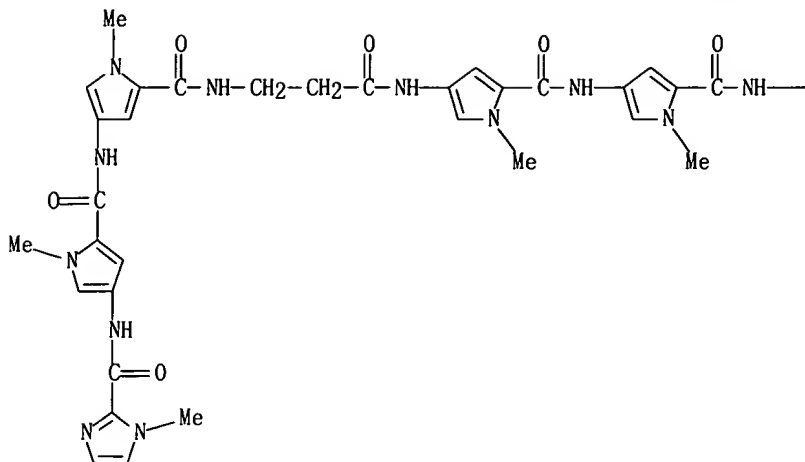
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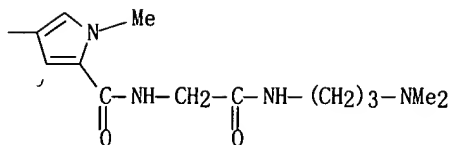
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L42 ANSWER 15 OF 17 HCAPLUS COPYRIGHT 2005 ACS on STN  
 AN 1997:151532 HCAPLUS  
 DN 126:157822  
 ED Entered STN: 08 Mar 1997  
 TI Synthesis of N-substituted oligomers as therapeutic agents  
 IN Zuckermann, Ronald N.; Goff, Dane A.; Ng, Simon; Spear, Kerry; Scott, Barbara O.; Sigmund, Aaron C.; Goldsmith, Richard A.; Marlowe, Charles K.; Pei, Yazhong; Richter, Lutz; Simon, Reyna  
 PA Chiron Corporation, USA  
 SO PCT Int. Appl., 175 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 IC ICM A61K038-02  
 CC 34-3 (Amino Acids, Peptides, and Proteins)  
 Section cross-reference(s): 1, 27

FAN.CNT 3

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9640202	A1	19961219	WO 1996-US8832	19960604 <--
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI				
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EP 789577	A1	19970820	EP 1996-921278	19960604 <--
EP 789577	B1	20030312		

R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL,  
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US 1993-126539	B2	19930924	<--	
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## CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
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WO 9640202	ICM	A61K038-02	
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US 5877278	ECLA	C07B061/00L; C07K001/04; C07K001/04C; C07K007/06A; C07K007/08A; C07K014/00B; C08G069/10	<--

AB The title process comprises a solid-phase method for synthesis of N-substituted oligomers, e.g., poly(N-substituted glycines) having a wide variety of side-chain substituents, to obtain compds. of potential therapeutic interest. Each N-substituted glycine monomer is assembled from two sub-monomers directly on the solid support. Each cycle of monomer addition consists of two steps: (1) acylation of a support-bound amine with an acylating agent containing a group capable of nucleophilic displacement by -NH<sub>2</sub>, such as a haloacetic acid, and (2) introduction of the side-chain by nucleophilic displacement of the leaving group with a second submonomer such as a primary amine, alkoxyamine, semicarbazide, acyl hydrazide, carbazate or the like. Repetition of the two step cycle of acylation and displacement gives the desired oligomers. Combinatorial libraries are disclosed.

ST polyglycine N substituted prepn therapeutic agent

IT Combinatorial library

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(synthesis of N-substituted oligomers as therapeutic agents)

IT 25718-94-9P, Poly(glycine)	145251-23-6P	145251-24-7P	145251-25-8P
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 186700-07-2P 186700-08-3P 186782-60-5P 186816-22-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(synthesis of N-substituted oligomers as therapeutic agents)

IT 51-45-6, Histamine, reactions 51-67-2, Tyramine 62-53-3, Aniline, reactions 64-04-0, Phenethylamine 78-81-9, Isobutylamine 92-67-1, 4-Aminobiphenyl 98-16-8, 3-Aminobenzotrifluoride 100-46-9, Benzylamine, reactions 106-95-6, Allyl bromide, reactions 107-11-9, 2-Propen-1-amine 109-73-9, 1-Butanamine, reactions 109-85-3, 2-Methoxyethylamine 110-89-4, Piperidine, reactions 111-26-2, Hexylamine 111-68-2, Heptylamine 121-05-1, N,N-(Diisopropyl)ethylenediamine 141-43-5, reactions 151-18-8, 3-Aminopropionitrile 155-09-9, trans-2-Phenylcyclopropylamine 495-69-2, Hippuric acid 525-03-1, 9-Aminofluorene 537-47-3, Phenyl semicarbazide 553-26-4, 4,4'-Bipyridyl 565-74-2, 2-Bromo-3-methylbutyric acid 578-54-1, 2-Ethylaniline 584-93-0, .alpha.-Bromovaleric acid 609-67-6, o-Iodobenzoyl chloride 613-94-5, Benzoylhydrazine 616-29-5, 1,3-Diamino-2-propanol 617-89-0, Furfurylamine 622-33-3, O-Benzylhydroxylamine 625-35-4 753-90-2, 2,2,2-Trifluoroethylamine 765-30-0, Cyclopropylamine 811-93-8, 1,2-Diamino-2-methylpropane 822-98-0, 2-Norbornylamine 870-46-2, tert-Butyl carbazate 929-06-6, 2-(2-Aminoethoxy)ethanol 937-39-3, Phenylacetic acid hydrazide 1001-53-2, N-Acetylenediamine 1003-03-8, Cyclopentylamine 1118-61-2, 3-Aminocrotononitrile 1631-26-1, N-Benzylmaleimide 2026-48-4 2038-03-1, 4-(2-Aminoethyl)morpholine 2217-40-5, 1,2,3,4-Tetrahydro-1-naphthylamine 2393-23-9, 4-Methoxybenzylamine 2516-47-4, Cyclopropylmethylamine 2620-50-0, Piperonylamine 3300-51-4, 4-Trifluoromethylbenzylamine 3399-73-3, 2-(1-Cyclohexenyl)ethylamine 3731-51-9, 2-Aminomethylpyridine 3963-62-0, 2,2-Diphenylethylamine 4360-51-4, Cinnamylamine 4403-69-4, 2-Aminobenzylamine 4795-29-3, Tetrahydrofurfurylamine 5331-43-1, Benzyl carbazate 5400-88-4, 4-tert-Butylcyclohexylamine 5452-35-7, Cycloheptylamine 5514-98-7, tert-Butyl 6-aminohexanoate 6238-14-8, 3-Aminoquinuclidine 7154-73-6, 1-(2-Aminoethyl)pyrrolidine 7328-91-8, 2,2-Dimethyl-1,3-propanediamine 7663-77-6, 1-(3-Aminopropyl)-2-pyrrolidinone 13214-66-9, 4-Phenylbutylamine 13991-36-1 15901-42-5, 3,3,5-Trimethylcyclohexylamine 16499-88-0, 3-Butoxypropylamine 18912-37-3, Hydrazinecarboxylic acid, 4-methoxyphenylmethyl ester 22572-38-9, Ethanamine, 2-(1,1-dimethylethylthio)- 29602-39-9 35019-66-0 35303-76-5, 4-(2-Aminoethyl)benzenesulfonamide 39959-51-8, 2-Iodobenzylamine 48133-71-7, 2-(2,6-Dichlorobenzylthio)ethylamine 50541-93-0, 4-Amino-1-benzylpiperidine 51857-17-1, N-tert-Butoxycarbonyl-1,6-hexanediamine 57260-73-8, N-tert-Butoxycarbonylethylenediamine 58859-46-4, Ethyl 4-amino-1-piperidinecarboxylate 62893-54-3, Cyclopropaneethanamine 66384-48-3 67953-04-2 79467-22-4 85068-29-7, 3,5-Bis(trifluoromethyl)benzylamine 88615-68-3, Ethanamine, 2-(1,1-Dimethylethoxy)- 167015-84-1 186700-05-0 186700-06-1

RL: RCT (Reactant); RACT (Reactant or reagent)

(synthesis of N-substituted oligomers as therapeutic agents)

IT 145251-31-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

RN	145251-31-6	HCAPLUS
CN	Glycinamide, N-butylglycyl-N-butylglycyl-N-butylglycyl-N-butylglycyl-N-(3-aminopropyl)glycyl-N-butylglycyl-N-butylglycyl-N-butylglycyl-N-butylglycyl-N-(3-aminopropyl)glycyl-N-butylglycyl-N-butylglycyl-N-butylglycyl-N-(3-aminopropyl)glycyl-N-butylglycyl-N-butylglycyl-N-butylglycyl-N-(3-aminopropyl)glycyl-N-butylglycyl-N-butylglycyl-N-butylglycyl-N-butylglycyl-N2-(3-aminopropyl)- (9CI) (CA INDEX NAME)	

[illegible][illegible]

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$$\text{—NH}_2$$


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PI	WO 9406451	A1	19940331	WO 1993-US9117	19930924 <--
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KP, KR, KZ, LK, LU, LV, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU,  
SD, SE, SK, UA, VN  
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE,  
BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

EP 671928 A1 19950920 EP 1993-923131 19930924 <--  
EP 671928 B1 20021127  
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JP 08501565 T2 19960220 JP 1993-508459 19930924 <--  
HU 72614 A2 19960528 HU 1995-855 19930924 <--  
AU 679945 B2 19970717 AU 1993-52920 19930924 <--  
AU 9352920 A1 19940412  
BR 9307092 A 19990330 BR 1993-7092 19930924 <--  
EP 1258492 A1 20021120 EP 2002-77404 19930924 <--  
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JP 3461505 B2 20031027 JP 1994-508459 19930924 <--  
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JP 2000239242 A2 20000905 JP 2000-38885 20000216 <--  
JP 3596752 B2 20041202  
US 2002115612 A1 20020822 US 2002-71577 20020208 <--  
PRAI US 1992-950853 A 19920924 <--  
EP 1993-923131 A3 19930924 <--  
JP 1994-508459 A3 19930924 <--  
WO 1993-US9117 W 19930924 <--  
US 1995-454511 B3 19950530 <--  
US 2000-573700 B3 20000519

## CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 9406451	ICM	A61K037-00
EP 1258492	ECLA	C08G069/10 <--
US 2002115612	ECLA	C07K001/04; C07K007/06A; C07K007/08A; C07K014/00B; C08G069/10 <--

OS MARPAT 122:133845

AB (N-substituted polyamide) monomers were prepared by (1) acylating an amine bound to a substrate with a sub-monomer acylating agent containing a leaving group to obtain a substrate-bound acylated amine having a leaving group, and (2) reaction of the latter with a second sub-monomer displacing agent containing an amino group to carry out nucleophilic displacement of the leaving group added during acylation. Repetition of the process affords e.g. oligomeric N-substituted glycines (NSGs) having significant biol. activity and proteolytic stability. Automated synthesis technol. makes the oligomers attractive for the generation and rapid screening of diverse peptidomimetic libraries. Thus, penta(N-phenylglycine)amide was prepared using an automated synthesizer in 83% yield using Rink amide polystyrene resin, PhNH<sub>2</sub>, and ICH<sub>2</sub>CO<sub>2</sub>H. Acylation reactions were carried out using diisopropylcarbodiimide in DMF; displacement reactions were carried out in Me<sub>2</sub>SO. Title compds. are claimed for use in diagnosis and therapy, specifically in antisense treatment.

ST polyglycine substituted automated prepn; peptide mimetic substituted polyglycine; glycine poly substituted automated prepn; haloacetate amine reaction solid phase; oligomer substituted solid phase prepn

IT Pharmaceuticals  
(antisense, substituted polyglycines, preparation of, by sub-monomer method)

IT Peptides, preparation  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(substituted polyglycines, preparation of, by sub-monomer method)

IT Polymers, preparation  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(oligomers, polyglycines and related compds., solid phase synthesis of,

IT	25718-94-9DP, Polyglycine, N-substituted	25734-27-4DP, Polyglycine, N-substituted	145251-23-6P	145251-24-7P	145251-25-8P	145251-26-9P
	145251-27-0P	145251-28-1P	145251-29-2P	145251-31-6P		
	160832-95-1P	160832-96-2P	160832-97-3P	160832-98-4P		
	160832-99-5P	160833-00-1P	160833-01-2P	160833-02-3P	160833-03-4P	
	160833-04-5P	160833-05-6P	160833-06-7P	160833-07-8P	160833-08-9P	
	160833-09-0P	160833-10-3P				

IT 51-67-2, 4-Hydroxyphenethylamine 64-04-0, Phenethylamine 64-69-7, Iodoacetic acid 67-62-9, Methoxyamine 74-89-5, Methylamine, reactions 79-08-3, Bromoacetic acid 79-11-8, Chloroacetic acid, reactions 92-67-1, 4-Aminobiphenyl 100-46-9, Benzylamine, reactions 109-73-9, Butylamine, reactions 109-85-3, 2-Methoxyethylamine 111-26-2, Hexylamine 537-47-3 613-94-5 622-33-3, Benzyloxyamine 765-30-0, Cyclopropylamine 870-46-2 937-39-3 1003-03-8, Cyclopentylamine 1068-57-1 2038-03-1, 4-(2-Aminoethyl)morpholine 3963-62-0 4801-27-8 5331-43-1 6294-89-9 18912-37-3 27532-96-3, Glycine tert-butyl ester hydrochloride 65915-94-8 75178-96-0 77128-70-2, Fmoc-Sar-OH

IT 145251-31-6P 160832-96-2P

RN 145251-31-6 HCAPLUS

Glycinamide, N-butylglycyl-N-butylglycyl-N-butylglycyl-N-butylglycyl-N-(3-aminopropyl)glycyl-N-butylglycyl-N-butylglycyl-N-butylglycyl-N-butylglycyl-N-(3-aminopropyl)glycyl-N-butylglycyl-N-butylglycyl-N-butylglycyl-N-(3-aminopropyl)glycyl-N-butylglycyl-N-butylglycyl-N-butylglycyl-N-butylglycyl-N-(3-aminopropyl)glycyl-N-butylglycyl-N-butylglycyl-N-butylglycyl-N-butylglycyl-N2-(3-aminopropyl)- (9CI) (CA INDEX NAME)

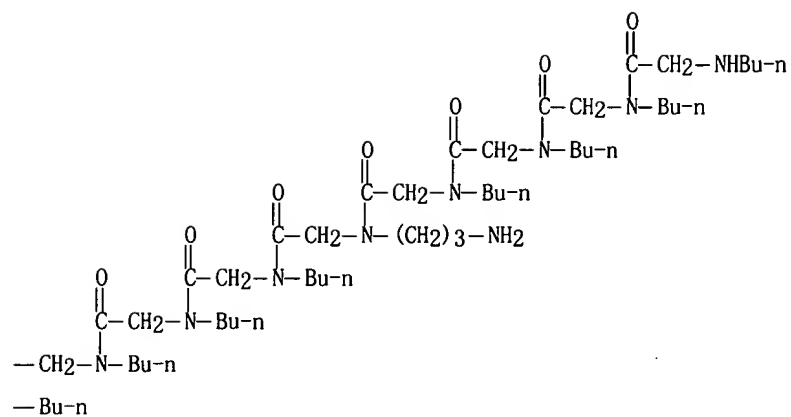
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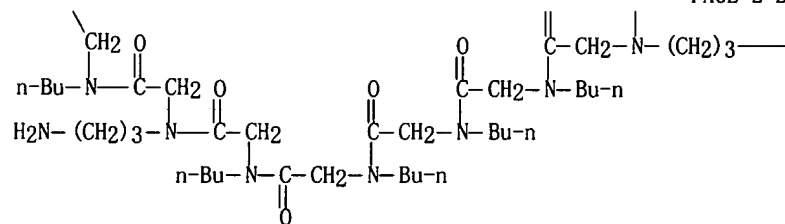
PAGE 1-B



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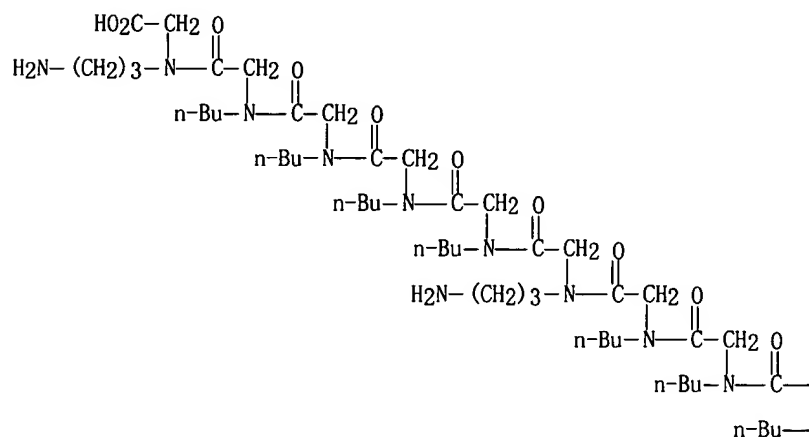
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$$\text{—NH}_2$$

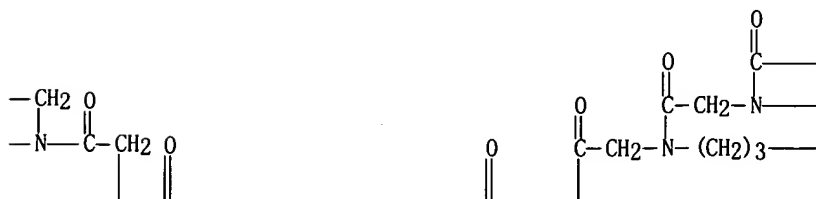
RN 160832-96-2 HCAPLUS

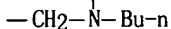
CN Glycine, N-butylglycyl-N-butylglycyl-N-butylglycyl-N-butylglycyl-N-(3-aminopropyl)glycyl-N-butylglycyl-N-butylglycyl-N-butylglycyl-N-butylglycyl-N-(3-aminopropyl)glycyl-N-butylglycyl-N-butylglycyl-N-butylglycyl-N-(3-aminopropyl)glycyl-N-butylglycyl-N-butylglycyl-N-butylglycyl-N-(3-aminopropyl)glycyl-N-butylglycyl-N-butylglycyl-N-butylglycyl-N-(3-aminopropyl)- (9CI) (CA INDEX NAME)

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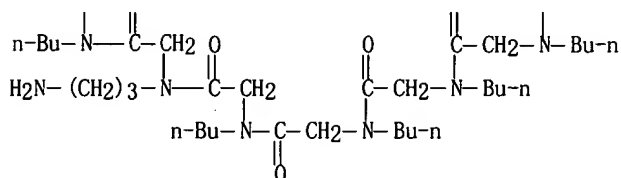


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L42 ANSWER ~~17 OF 17~~ HCAPLUS COPYRIGHT 2005 ACS on STN  
AN 1992:587848 HCAPLUS  
DN 117:187848  
ED Entered STN: 15 Nov 1992  
TI Propenamide derivatives, polymers, copolymers, and use thereof in  
inhibiting adhesion of and culturing animal cells  
IN Komazawa, Hiroyuki; Kojima, Masayoshi; Orikasa, Atsushi  
PA Fuji Photo Film Co., Ltd., Japan  
SO Eur. Pat. Appl., 75 pp.  
CODEN: EPXXDW  
DT Patent  
LA English  
IC ICM C07K005-08  
ICS C12N005-00; A61K037-02; A61K047-48; A61L027-00; C08F289-00;  
C07K017-06  
CC 9-11 (Biochemical Methods)  
Section cross-reference(s): 1, 34, 35, 38  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 488258	A2	19920603	EP 1991-120332	19911127 <---
	EP 488258	A3	19930505		
	EP 488258	B1	19960417		
	R: CH, DE, GB, LI				
	JP 04213310	A2	19920804	JP 1991-66157	19910329 <---
	JP 2745342	B2	19980428		
	JP 04213308	A2	19920804	JP 1991-66158	19910329 <---
	JP 04213312	A2	19920804	JP 1991-66160	19910329 <---
	JP 2745343	B2	19980428		

	US 6046289	A	20000404	US 1994-278251	19940720 <--
PRAI	JP 1990-324611	A	19901127	<--	
	JP 1990-334792	A	19901130	<--	
	JP 1990-334793	A	19901130	<--	
	JP 1991-66157	A	19910329	<--	
	JP 1991-66158	A	19910329	<--	
	JP 1991-66160	A	19910329	<--	
	US 1991-798624	B1	19911126	<--	

## CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
EP 488258	ICM	C07K005-08
	ICS	C12N005-00; A61K037-02; A61K047-48; A61L027-00; C08F289-00; C07K017-06
EP 488258	ECLA	A61K047/48R; C07K005/08B1; C07K014/75; C07K014/78; C12N005/00S <--
US 6046289	ECLA	A61K047/48R; C07K005/08B1; C07K014/75; C07K014/78; C12N005/00S <--
AB		Propenamide derivs. R1R2C:CR3CO[NH]Q [Q = R4COX-Arg-Gly-Asp-YnZR5; R1, R2 = H, CO2H; R3 = H, halo, Me, Et, CH2CO2H; X, Y = amino acid, peptide; Z = O, NH; 1 of R4, R5 = H, and the other = (substituted) alkylene or arylene; n = 1-5; brackets indicate group may be present or absent], their (crosslinked) polymers, and their copolymers with H2C:CR6[CO][W]R7 [R6 = H, C1-3 (substituted) alkyl; W = O, NH; R7 = (substituted) alkyl or aryl], where the peptide portion of Q is an adhesive peptide, are useful for inhibiting adhesion of animal cells, for inhibiting coagulation and/or adhesion of blood platelets, and as a substrate (e.g. a hydrogel) for cultivating animal cells. They may be used in modulating immune function, wound healing, and intravascular platelet coagulation and in healing nervous disorders. Examples of preparation of monomers, polymers, and copolymers are presented. Thus, adhesion of blood vessel endothelium cells to fibronectin-coated wells in plastic plates was strongly inhibited by radical-polymerized H2C:CMcC(O)NHC2H4(CO)-Arg-Gly-Asp-Ser at 0.5 mg/mL.
ST		cell adhesion propenamide deriv polymer; polypropenamide blood platelet adhesion; culture cell propenamide peptide deriv
IT		Animal cell
		Blood platelet
		(adhesion of, peptide-containing polymers inhibition of)
IT		Fibronectins
		RL: BIOL (Biological study)
		(blood vessel endothelium cell adhesion to, peptide-containing polymers inhibition of)
IT		Blood platelet aggregation inhibitors
		(peptide-containing polymers)
IT		Animal tissue culture
		(peptide-containing polymers in media for)
IT		Adhesion
		(bio-, of animal cells and blood platelets, peptide-containing polymers inhibition of)
IT		Blood vessel
		(endothelium, adhesion of cells of, peptide-containing polymers inhibition of)
IT		Gels
		(hydro-, of peptide-containing polymers, in animal cell culture media)
IT		Animal growth regulators
		RL: BIOL (Biological study)
		(vitronectins, blood vessel endothelium cell adhesion to, peptide-containing polymers inhibition of)
IT		56-12-2, 4-Aminobutyric acid, reactions 56-85-9, Glutamine, reactions 60-32-2, 6-Aminocaproic acid 61-90-5, Leucine, reactions 150-13-0, p-Aminobenzoic acid 660-88-8, 5-Aminovaleric acid 693-57-2,

12-Aminolauric acid  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (Schotten-Baumann reaction of, with acrylic acid derivs.)

IT 107-15-3, Ethylenediamine, reactions 107-95-9, .beta.-Alanine  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (Schotten-Baumann reaction of, with methacrylic chloride)

IT 79-10-7, 2-Propenoic acid, reactions 920-46-7, Methacrylic chloride  
 4390-96-9, Ethacrylic chloride  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (Schotten-Baumann reaction of, with .omega.-amino acids)

IT 23680-31-1  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (benzylation of)

IT 1668-10-6 4530-20-5 7536-58-5 13798-75-9  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (peptide coupling reaction of)

IT 143783-30-6P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation and deblocking of)

IT 63024-02-2P 69871-79-0P 79113-14-7P 139113-04-5P 143130-70-5P  
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 (Reactant or reagent)  
 (preparation and peptide coupling reaction of)

IT 15286-98-3P 23578-45-2P 34373-07-4P 39033-99-3P 45235-77-6P  
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 (Reactant or reagent)  
 (preparation and polymerization of, in cell adhesion inhibitor preparation)

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 143901-08-0P 143955-78-6P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of, as cell adhesion inhibitor)

IT 69174-86-3P 131618-71-8P 143783-31-7P 143865-49-0P 143865-50-3P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of, in cell adhesion inhibitor preparation)

IT 68262-71-5  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, with aminoethyl methacrylamide)

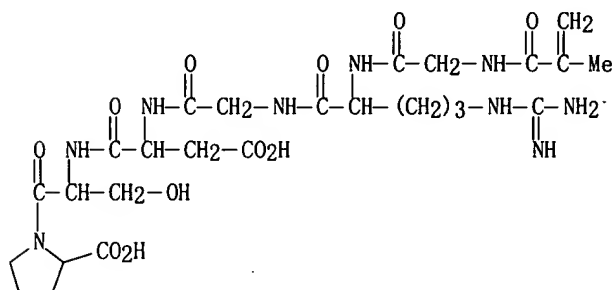
IT 100-11-8, p-Nitrobenzyl bromide  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, with glycine derivative)

IT 108-00-9  
 RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of, with methacryloyl chloride)  
 IT 100-39-0, Benzyl bromide  
 RL: BIOL (Biological study)  
 (serine derivative benzylation with)  
 IT 143821-04-9P 143821-05-0P 143865-69-4P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of, as cell adhesion inhibitor)  
 RN 143821-04-9 HCAPLUS  
 CN L-Proline, 1-[N-[N-[N2-[N-(2-methyl-1-oxo-2-propenyl)glycyl]-L-arginyl]glycyl]-L-.alpha.-aspartyl]-L-seryl]-, polymer with N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)amino]-1-propanaminium chloride (9CI) (CA INDEX NAME)

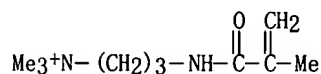
CM 1

CRN 143795-48-6  
 CMF C26 H41 N9 O11



CM 2

CRN 51410-72-1  
 CMF C10 H21 N2 O . C1

● Cl<sup>-</sup>

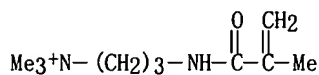
RN 143821-05-0 HCAPLUS  
 CN L-Serine, N-[N-[N2-[N-[N-[N-(1-oxo-2-propenyl)glycyl]glycyl]glycyl]-L-arginyl]glycyl]-L-.alpha.-aspartyl]-, polymer with N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)amino]-1-propanaminium chloride (9CI) (CA INDEX NAME)

CM 1

CRN 143783-27-1  
 CMF C24 H38 N10 O12

$$\begin{array}{ccccccc} \text{HO}-\text{CH}_2-\overset{\text{CO}_2\text{H}}{\underset{|}{\text{CH}}}-\text{NH}-\overset{\text{O}}{\parallel}\text{C}- & & \text{O} & & \text{O} & & \text{O} \\ & & | & & | & & | \\ & & \text{HO}_2\text{C}-\text{CH}_2-\text{CH}-\text{NH}-\overset{\text{O}}{\parallel}\text{C}-\text{CH}_2-\text{NH}-\overset{\text{O}}{\parallel}\text{C}-\text{CH}- & (\text{CH}_2)_3- & \text{NH}-\overset{\text{O}}{\parallel}\text{C}-\text{NH}_2 \\ & & & & | \\ & & & & \text{NH} \end{array}$$
$$-\text{CH}_2-\text{NH}-\overset{\text{O}}{\parallel}\text{C}-\text{CH}=\text{CH}_2$$

CRN 51410-72-1  
CMF C10 H21 N2 O . C1

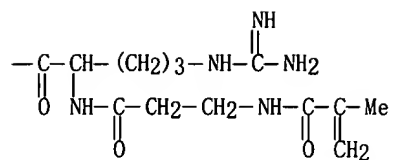


●  $\text{Cl}^-$

CRN 143795-46-4  
CMF C43 H71 N19 018

$$\begin{array}{c} \text{CO}_2\text{H} \\ | \\ \text{HO}_2\text{C}-\text{CH}_2-\text{CH}-\text{NH}-\overset{\text{O}}{\parallel}\text{C}-\text{CH}_2-\text{NH}-\overset{\text{O}}{\parallel}\text{C}- \\ | \quad \quad \quad | \\ \text{O}=\text{C}-\text{NH}-\text{CH}-(\text{CH}_2)_3-\text{NH}-\overset{\text{NH}}{\parallel}\text{C}-\text{NH}_2 \\ | \quad \quad \quad | \quad \quad \quad | \quad \quad \quad | \\ \text{HO}_2\text{C}-\text{CH}_2-\text{CH}-\text{NH}-\overset{\text{O}}{\parallel}\text{C}-\text{CH}_2-\text{NH}-\overset{\text{O}}{\parallel}\text{C}-\text{CH}-(\text{CH}_2)_3-\text{NH}-\overset{\text{NH}}{\parallel}\text{C}-\text{NH}_2 \\ | \quad \quad \quad | \quad \quad \quad | \quad \quad \quad | \quad \quad \quad | \\ \text{NH}-\overset{\text{O}}{\parallel}\text{C}-\text{CH}-\text{CH}_2-\text{CO}_2\text{H} \\ | \quad \quad \quad | \\ \text{NH}-\overset{\text{O}}{\parallel}\text{C}-\text{CH}_2-\text{NH}- \end{array}$$

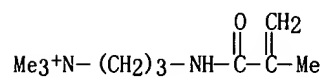
PAGE 1-B



CM 2

CRN 51410-72-1

CMF C10 H21 N2 O . Cl

● Cl<sup>-</sup>

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